DIFFERENCES IN STUDENT AFFAIRS ASSESSMENT CULTURE BY INSTITUTIONAL SIZE AND GEOGRAPHIC REGION

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by

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DEDICATION

To my beautiful daughter, Samantha—You will always be my greatest accomplishment.

ABSTRACT

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To provide insight for key stakeholders in divisions of student affairs, an inquiry was made as to whether differences were present in student affairs assessment culture as a function of institutional size, geographic region, and institutional size and geographic region. Thus, a factorial multivariate analysis of variance was conducted utilizing existing nationwide data from the *Student Affairs Survey of Assessment Culture*. Results indicated no statistically significant differences were present based on institutional size, but statistically significant differences were present based on geographic region and both institutional size and geographic region. The findings indicated that decision-makers should not consider their institution's size when managing assessment culture. However, researchers should explore the influence of the observed differences in future studies.

KEYWORDS: Assessment culture, Student affairs, Survey of assessment culture, Institutional size, Geographic region

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CHAPTER I

Introduction

Assessment has long been a staple of higher education and will always be a vital component to the succession and progression of higher education. Assessment is imperative because the results from assessing students, programs, professors, services, provide justification for why business is conducted as such. Assessment results not only provide insight to those who conduct it, but also provide evidence of learning to internal and external entities. Those entities include individuals involved with federal and state mandated compliance, politicians, accreditation firms, prospective and current students and their parents, community partners, and many more. Even more so, Kuh and Ikenberry (2009) determined that the main reason higher education institutions conduct assessment is because of accreditation. With institutions dedicating numerous resources annually on assessment, an assumption could be made that a large portion of those resources are dedicated simply to maintaining credentials. While meeting accreditation guidelines is crucial for institutions of higher education, conducting assessment to improve student learning is even more crucial as it pertains to the very nature of higher education in general, which is to help students achieve their educational goals.

As a result of the need for assessment that further promotes student learning and accountability, many scholars have called for institutions to develop cultures of assessment (Fuller & Lane, 2017; Grunwald & Peterson, 2003; Kezar, 2012; Rosaen, Hayes, Paroske, & De La Mare, 2013; Schuh, 2013; Seagraves & Dean, 2010; Shefman, 2014; Slager & Oaks, 2013). A culture of assessment not only intertwines assessment into routine activities, but also does so intrinsically so that employees conduct assessment with the intention of helping students—satisfying all other required internal and external stakeholders is just a plus. Research on creating and maintaining cultures of assessment in academic affairs has been prevalent, but research inquiring into the development of cultures of assessment in student affairs has not been as common. Divisions of student affairs have long been staples of the college student experience, providing services and experiences not typically found in traditional classrooms. However, with the continual rising cost of tuition and fees, consistent calls for accountability from both internal and external entities, and declines in funding, the need to justify the existence of student affairs is becoming more and more necessary.

Assessment has been practiced regularly in academic affairs, and although assessment is not foreign to student affairs, divisions of student affairs have not typically conducted regular assessment or been included in institutional initiatives pertaining to assessment (Schuh, 2013; Seagraves & Dean, 2010; Weisler, 2015). The need to explore how divisions of student affairs adapt to ever-elevating accountability measures is crucial. Further understanding of whether external factors create differences in cultures of assessment in divisions of student affairs is yet another way for researchers to explore the dynamics of what is actually happening and how to adjust as needed.

Background of the Problem

Assessment in higher education began as early as 1900 with the arrival of standardized testing (Shavelson, 2007). From that point, Shavelson (2007) identified the development of assessments pertaining to overall learning and graduate studies as beginning in the 1930s, which eventually evolved into the standardized tests commonly known now as Graduate Record Examination, American College Testing, etc. From the late 1970s until the present, the development of external accountability has influenced higher education (Shavelson, 2007). The majority of the assessment demands, implementations, and benchmarks were implemented more so on divisions of academic affairs rather than divisions of student affairs. Divisions of student affairs arrived later to the importance of assessment, and even later to the requisite for assessment to demonstrate impact on campus (Henning, 2016; Schuh & Gansemer-Topf, 2010).

External accountability placed on higher education has come from numerous areas, not limited to, accreditation firms, regulatory agencies, and public discourse. Since the 1980s, regional accreditation agencies began requiring institutional effectiveness plans making assessment a large component for how colleges and universities attain and retain accreditation (Seagraves & Dean, 2010; Weisler, 2015). In addition, numerous federal and state agencies have continually placed standards on what knowledge and skills students should have attained by the end of their college degree per what employers and the public deem qualified for employment (Walser, 2015). In performing these tasks, everyone from accreditors to employers expect higher education institutions to be able to document the outcomes of learning and development via assessment (Al-Thani, Abdelmoneim, Daoud, Cherif, & Moukarzel, 2015; Seagraves & Dean, 2010; Walser, 2015; Weisler, 2015). For all of these reasons, assessment has become a necessary obligation for higher education institutions, requiring a significant amount of time and resources.

While assessment is a fundamental component to addressing the concerns of external accountability, there are personnel in higher education who maintain a negative view of assessment. Some in higher education fear that having to conduct assessment will take from their constricted resources (e.g., money, time, labor) and add more to their already robust workloads (Elkins, 2015; Schuh, 2013; Seagraves & Dean, 2010; Shefman, 2014). Others fear that they may be reprimanded for unfavorable assessment results or judged by an external auditor who they feel does not properly understand higher education (Baas, Rhoads, & Thomas, 2016; Seagraves & Dean, 2010; Shefman, 2014). There is also the fear that assessment results will be ignored by their administration, which may not be willing to make changes at the institution and may lack an institutional commitment to continually improve (Al-Thani et al., 2015; Lakos & Phipps, 2004; Schuh, 2013). The increased external demand for accountability and the hesitance of various higher education personnel to commit to assessment led to more inquiry as to how to assessment could be incorporated into the normal work routine.

Thus, assessment scholars have conducted research on the best methods for incorporating assessment into higher education institutions, not only to satisfy external influencers, but also to encourage and acclimate personnel to utilize assessment to continually improve student success (Kezar, 2012; Shipman, Aloi, & Jones, 2003; Walser, 2015). While much of the research produced centered around academic affairs (Grunwald & Peterson, 2003; Rosaen et al., 2013; Wang & Hurley, 2012), there were some researchers who discussed the importance of the involvement of student affairs in assessment (Elkins, 2015; Green, Jones, & Aloi, 2008; Seagraves & Dean, 2010; Slager & Oaks, 2013). These findings, along with political, economic, and social changes to funding and certification, have led researchers to study cultures of assessment.

Organizational culture in general is important to observe, as a thorough understanding of one’s organizational culture allows for easier transitions of change

(Cameron, 1984; Fjortoft & Smart, 1994; Schein, 2017; Sporn, 1996; Tierney, 1988). Organizational culture describes the typically unspoken environment that fundamentally guides the emotional and mental aspects of an organization (Schein, 2017). Incorporating a new culture into an organization (i.e., culture of assessment) requires numerous steps and implementations, and above all, the dedication of the leadership and the alignment with institutional vision and goals (Fjortoft & Smart, 1994; Sporn, 1996; Tierney, 1988).

There are various explanations regarding what a culture of assessment is and what contributes to such a culture. Fuller (2011) identified a culture of assessment as "the primary and often unexplored system undergirding assessment practice on a campus" (p. 2). Similarly, Lakos and Phipps (2004) defined a culture of assessment as "an organizational environment in which decisions are based on facts, research and analysis, and where services are planned and delivered in ways that maximize positive outcomes and impacts for customers and stakeholders" (p. 352). While both Fuller (2011) and Lakos and Phipps (2004) provided very thorough and useful definitions of assessment culture, not all cultures of assessment produce their maximized positive outcomes as stated by Lakos and Phipps (2004). A culture of assessment is more of a current state of how an assessment practicing organization is functioning, responding, and moving forward given the fluidity of both internal and external climates. Although the presence of a culture of assessment is likely to be beneficial for an organization, there are some institutions with cultures of assessment that thrive more than others (Skidmore, Hsu, & Fuller, 2018). Thus, for the purposes of this study, the definition provided by Fuller (2011) was selected to define assessment culture.

Researchers have indicated that higher education personnel were more willing to conduct assessment when institutions begin to place authentic value on assessment with genuine intent to utilize yielded assessment results (i.e., establish a culture of assessment) (Astin, 1993; Fuller, 2011; Fuller & Skidmore, 2014; Fuller, Skidmore, Bustamante, & Holzweiss, 2016; Lakos & Phipps, 2004; Walser, 2015; Weiner, 2009). Additionally, those particular institutions who do establish a culture of assessment reap the benefits of utilizing properly structured assessment and the produced results, which further benefit student learning and development (Lakos & Phipps, 2004; Walser, 2015; Weiner, 2009).

Researchers agree that if a cultivation of assessment is to develop, assessment must be incorporated into the daily routines of those in the division (Kezar, 2012; Ndoye & Parker, 2010; Rosaen et al., 2013; Weiner, 2009). Schuh (2013) identified a culture of assessment as one where personnel were able to comprehend the necessity to gather data methodically and routinely to justify their actions to stakeholders and invoke continual improvement. The incorporation of assessment into a daily routine could range from the gathering of ongoing data to the integration of previous assessment findings into current programs (Ndoye & Parker, 2010; Rosaen et al., 2013; Schuh, 2013; Weiner, 2009). Making assessment a part of each person's daily routine could be as simple as having a conversation about assessment and what it means to the department or how findings of current assessments will be utilized (Ndoye & Parker, 2010; Rosaen et al., 2013; Weiner, 2009). Institutions that build a comprehensive pledge to helping personnel understand, utilize, and create meaningful assessment will create the best opportunities for student success and student learning (Rosaen et al., 2013).

Notably, assessment routines vary based on the type and kind of institution, the department, and the goals of the assessments being conducted (Weiner, 2009). A large volume of the literature on cultures of assessment specifically pertained to cultures of assessment in divisions of academic affairs (Al-Thani et al., 2015; Baas et al., 2016; Duff, 2010; Farkas, 2013; Fuller, 2013; Fuller, Henderson, & Bustamante, 2015; Fuller & Skidmore, 2014; Fuller et al., 2016; Hill, 2005; Holzweiss, Bustamante, & Fuller, 2016; Hong, 2018; Kalu & Dyjur, 2018; Lakos & Phipps, 2004; Lane, Lane, Rich, & Wheeling, 2014; Ndoye & Parker, 2010; Piascik & Bird, 2008; Schlitz et al., 2009; Schroeder & Mashek, 2007; Schuh, 2013; Skidmore et al., 2018; Verzinski et al., 2019; Weiner, 2009). Assessment culture in divisions of academic affairs have been a highly researched area due to the heavy scrutiny faced by both internal and external influences that demand proof of the occurrence of learning. However, some scholars have begun to study cultures of assessment in student affairs within the last decade (Fuller & Lane, 2017; Schuh, 2013; Seagraves & Dean, 2010; Shefman, 2014).

Regardless of division studied in higher education, the utilization of qualitative methods outnumbers the use of quantitative methods when studying cultures of assessment. In addition, in the literature reviewed there was a generic shortage of the utilization of theoretical frameworks when studying cultures of assessment. While a few researchers did utilize theoretical frameworks for their studies (i.e., Farkas, 2013; Fuller, 2011; Fuller, 2013; Fuller & Skidmore, 2014; Fuller et al., 2016; Holzweiss et al., 2016; Lane et al., 2014; Skidmore et al., 2018), there remained a scarcity of the application of theoretical framework in the body of literature pertaining to cultures of assessment.

Moreover, the majority of the research reviewed focused on institutions establishing and sustaining cultures of assessment with no exploration of contextual factors.

An attempt was made to fill the gaps in the literature by contributing more research on assessment culture and divisions of student affairs. Moreover, a theoretical framework was utilized in this study to contribute to the standardization of researchers utilizing a theoretical framework when studying assessment culture in general. Furthermore, quantitative methods were selected in this study in an effort to contribute to mending the gap in the literature reviewed and to encourage future researchers to utilize quantitative methods when exploring assessment culture.

Statement of the Problem

Divisions of student affairs and their leaders need to be properly prepared to address growing accountability concerns. Accountability measures placed on institutions of higher education are not dissipating anytime soon. Quite the contrary, they are expanding. Assessment scholars have recommended that a culture of assessment be implemented into institutions of higher education so that universities can benefit from already required assessment, and improve student learning (Al-Thani et al., 2015; Fuller, 2011; Fuller & Lane, 2017; Fuller & Skidmore, 2014; Fuller et al., 2016; Lakos & Phipps, 2004; Schuh, 2013; Walser, 2015; Weiner, 2009). However, developing a culture of assessment in divisions of student affairs may prove difficult for a number of reasons.

Firstly, there is a lack of literature on cultures of assessment in student affairs (Green et al., 2008; Shefman, 2014) when compared to the amount of studies conducted on academic affairs and cultures of assessment. Due to the vast differences between academic affairs (e.g., learning takes place in the classroom) and student affairs (e.g., learning takes place virtually anywhere outside of the classroom), more research is needed specifically on student affairs. More research on how divisions of student affairs implement cultures of assessment can help practitioners gauge how to cultivate assessment on their own campuses.

Secondly, the majority of the studies conducted on cultures of assessment were qualitative based. While qualitative studies are very insightful and provide extremely useful data, they can lack the generalization necessary to inform the masses on cultures of assessment. Also, qualitative studies are often difficult to replicate.

Thirdly, the literature reviewed generally lacked a theoretical framework for cultures of assessment. In most of the studies reviewed, researchers did not even utilize a theoretical framework their studies. Some of the studies reviewed utilized the following frameworks: *Kotter's Eight Step Model* (Farkas, 2013; Lane et al., 2014), the Assessment Culture Matrix (Ndoye & Parker, 2010), or Maki's (2010) *Principles of an Inclusive Commitment* (Fuller, 2011; Fuller, 2013; Fuller & Skidmore, 2014; Fuller et al., 2016; Holzweiss et al., 2016; Skidmore et al., 2018). A specific need for more studies utilizing frameworks to better comprehend cultures of assessment was present.

Lastly, the body of literature on cultures of assessment largely investigated how to create and sustain cultures of assessment by observing internal factors. However, given the fluidity of universities and colleges, the literature lacked studies exploring how other factors might contribute to differences in assessment culture. Specifically, an exploration of contextual factors (i.e., institutional size and geographic region) has yet to be piloted despite researchers indicating a need (Elkins, 2015; Fuller et al., 2016; Holzweiss et al., 2016; Skidmore et al., 2018).

Overall, the unique vantage point that student affairs practitioners have with students has the potential to contribute to the development of new and improved ways to conduct assessment in a collaborative manner (Banta & Kuh, 1998; Fuller, 2013; Schuh, 2013; Shefman, 2014). If divisions of student affairs were able to cultivate cultures of assessment, higher contributions to academic success might be feasible. Additionally, improving student learning and developing new methods of campus involvement and inclusion would be more probable in the presence of a culture of assessment, because there would be a deeper understanding of the impact of services provided.

Purpose of the Study

The purpose of this quantitative study was to identify whether differences exist between the perceptions of student affairs staff members at institutions of higher education nationwide based on their institutional size, geographic region, and both institutional size and geographic region combined. An inquiry into whether differences were present based on contextual factors (i.e., institutional size and geographic region) provided insightful information and a better understanding of cultures of assessment in student affairs. Many researchers have developed numerous indicators of what a culture of assessment entails when incorporated into institutions. The factors explored were beyond those associated with the personnel at institutions to determine whether differences exist. The more decision-makers in divisions of student affairs are aware of differences in their assessment culture when observed by contextual factors, the better they can strategize the implementation of cultures of assessment into the routines of their staff.

Also, this study contributed to the body of research on cultures of assessment in student affairs. Simultaneously, since quantitative methods were used, this study not only offered insight for practitioners interested in quantitative methods to study cultures of assessment, but also contributed to the low presence of quantitative studies on the subject matter. In doing so, future researchers have the opportunity to build further quantitative studies.

Additionally, the use of a theoretical framework could influence future researchers to utilize theoretical framework in their assessment culture research. Since the topic is fairly understudied, the continual applicability of theoretical frameworks may introduce new understanding to the body of research. Therefore, frameworks provided from various researchers on cultures of assessment were examined and compared to determine which framework best suited this study. In addition, the selection of a theoretical framework for this study and the continual applicability of that framework may help future researchers in determining whether the framework used is suitable for future studies on assessment culture.

The foremost purpose of this study was to better inform higher education administrators, student affairs practitioners, and other institutional decision-makers with more information in an effort to provide guidance on creating and maintaining a culture of assessment. Stakeholders should be aware of what other factors not previously explored create differences on how cultures of assessment are developed and sustained. For many years, researchers have investigated the need for the cultivation of assessment in numerous facets of higher education, but there is scarcity in the exploration of assessment culture in student affairs (Fuller, 2013; Green et al., 2008; Schuh, 2013;

Shefman, 2014). The importance of studying assessment culture in student affairs pertains to the delayed entrance of student affairs into the assessment realm (i.e., assessment started heavily in the academic affairs) and the substantial influence that student affairs staff have on students outside of the classroom (Astin, 1993; Henning, 2016; Schuh, 2013; Schuh & Gansemer-Topf, 2010; Seagraves & Dean, 2010; Weisler, 2015). As Pascarella and Terenzini (2005) concluded, the experience that a student has outside of the classroom can have a very important influence of the success of that student.

Conceptual Framework

Assessment in higher education is conducted for a variety of reasons; however, accountability to both internal and external entities appears to be the largest reason assessment is conducted (Elkins, 2015). Nevertheless, as higher education professionals, the ultimate reason for conducting assessment should be an inherent commitment and responsibility to improve student learning since students are the foundational purpose of higher education. For this reason, Maki (2010) was selected as the framework for this study. Maki (2010) developed *Principles of an Inclusive Commitment*, which described the necessary elements needed for an institution to create an environment rich in assessment with the intention of being committed to continually improving student learning. Maki's (2010) *Principles of an Inclusive Commitment* have also been utilized by various studies pertaining to cultures of assessment (Fuller, 2011; Fuller, 2013; Fuller et al., 2016; Fuller & Skidmore, 2014; Holzweiss et al., 2016; Skidmore et al., 2018). Specifically, Maki's (2010) *Principles of an Inclusive Commitment* are:

> (a) Meaningful anchored in the educational values of an institution—articulated in a principles-of-commitment statement; (b) intentionally designed to foster interrelated positions of inquiry about the efficacy of educational practices among educators, students, and the institution itself as a learning organization; and (c) woven into roles and responsibilities across an institution from the chief executive officer through senior administrators, faculty leaders, faculty, staff, and students. (p. 9)

Maki (2010) goes into numerous ways that institutions can instill these principles into their organizations. The researcher called for higher education institutions to shift their cultures from conducting assessment to meet the needs of external drivers to conducting assessment to meet internal needs or having an inherent motivation to improve student learning. Maki (2010) also recommended incorporating student learning measures throughout an institution and even after students graduate and enter the workforce. The researcher also discussed the importance of institutions utilizing student learning to explore how to improve teaching methods.

In addition, Maki (2010) explained that while it was important for institutions to assess learning practices, institutions should also attempt to incorporate assessment and student learning to explore how to become better instructors and practice better deliveries of information. The researcher also discussed the role of professional organizations and their influence on student affairs. Maki (2010) called for the various student affairs professional organizations that have covered assessment in student affairs (i.e., American College Personnel Association [ACPA]; Student Affairs Administrators in Higher Education [NASPA]; Council for the Advancement of Standards [CAS]) to embrace student learning as the main focus for conducting assessment when educating professionals in the field. Additionally, Maki (2010) recommended institutions become student-centered and base their policies, methods, and decisions on promoting student learning inside and outside of the classroom. The last recommendation from Maki (2010) was for institutions to commit to becoming cultures of continual inquiry and improvement.

Research Question

This study inquired whether differences existed among divisions of student affairs assessment culture when distributed by contextual variables. The dependent variable used in this study was assessment culture. Assessment culture was measured using *Assessment Culture Scales*, which consisted of the following: (a) *Focus on Student Learning;* (b) *Fear or Distrust of Assessment*; (c) *Benefits of Assessment*; (d) *Clarity of Assessment Leadership*; (e) *Use of Assessment Data*; and (f) *Sharing Assessment Results* (Fuller, 2013; Fuller & Lane, 2017; Fuller & Skidmore, 2014; Fuller et al., 2016). The independent variables for this study were (a) *institutional size,* (b) *geographic region,* and (c) *institutional size and geographic region*. Thus, the following research questions will be addressed in the study:

1. What differences, if any, in assessment culture were present as a function of institutional size?
2. What differences, if any, in assessment culture were present as a function of geographic region?
3. What differences, if any, in assessment culture were present as a function of institutional size and geographic region?

Data were obtained from the *Student Affairs Survey of Assessment Culture* for secondary analyses of the existing data. Therefore, the dependent variables were based on those variables assessed in studies conducted by Fuller (2013), Fuller and Lane (2017), Fuller and Skidmore (2014), and Fuller et al. (2016). In addition, numerous scholars in the literature reviewed also identified one or more of the identified components of the *Assessment Culture Scales* as contributing to assessment culture (Al-Thani et al., 2015; Baas et al., 2016; Duff, 2010; Farkas, 2013; Hill, 2005; Hong, 2018; Kalu & Dyjur, 2018; Lakos & Phipps, 2004; Lane et al., 2014; Ndoye & Parker, 2010; Piascik & Bird, 2008; Schlitz et al., 2009; Schroeder & Mashek, 2007; Schuh, 2013; Skidmore et al., 2018; Verzinski et al., 2019; Walser, 2015; Weiner, 2009).

Significance of the Study

Findings from the study could propel further investigation into what external factors may be interfering or assisting cultures of assessment in divisions of student affairs. Despite researchers having identified factors attributing to cultures of assessment (Duff, 2010; Farkas, 2013; Fuller, 2013; Fuller & Lane, 2017; Fuller & Skidmore, 2014; Fuller et al., 2016; Hill, 2005; Lakos & Phipps, 2004; Lane et al., 2014; Ndoye & Parker, 2010; Weiner, 2009), Smart, Kuh, and Tierney (1997) found that the size of an institution can play a role in how an institution and the respective faculty and staff respond to internal and external factors; thus, signifying that contextual factors may have an impression on an institution's culture outside of the realm of the staff within the institution itself. Accordingly, this study provides insight into where future research on cultures of assessment in student affairs might be directed, despite that the intention of this study was to observe, not explain. Arguably, this study could even give insight to researchers inquiring into cultures of assessment in general, and not just in divisions of student affairs, should the null hypotheses be rejected.

Potential benefits from this study important to the student affairs profession. Student affairs is fundamental to the totality of the college career (Pascarella & Terenzini, 2005), especially when taking into consideration that many of the leadership and life skills students learn during college stem from a student’s co-curricular experience. However, with increasing demands from external stakeholders (e.g., accreditation and government entities), divisions of student affairs are in dire need of conducting assessment and recording their contributions to student learning and success (Seagraves & Dean, 2010; Weisler, 2015). Therefore, the lack of research on cultures of assessment will continually plague the profession until more researchers take the initiative to investigate as done in this study.

Student success has always been the goal of the student affairs profession, but as mentioned by Maki (2010), employee morale can improve or challenge the cultivation of assessment. By improving the understanding of an organization’s contextual surroundings, researchers can possibly help improve the morale of student affairs practitioners. Improving the morale of student affairs practitioners will help create more buy-in into assessment. In turn, assessment could become the duty of all employees and the success of the division of student affairs as a whole, developing an organization-wide culture of assessment (Maki, 2010).

Similarly, administrators in higher education could benefit from this study since administrators make decisions. As previously mentioned, most of the current literature on cultures of assessment pertained to strengthening the culture from within and not necessarily considering how contextual factors might influence the population and the way things are done. This study includes insight for administrators as to whether their institutional size and geographic region create differences when assessment culture in student affairs are considered. In knowing this information, administrators can look into various ways to combat any negative differences should the need arise.

Moreover, as resources in higher education become even more competitive and scarce, an increase in the demand for student affairs employees to justify the existence of their departments and the validity of their services has ensued. In further understanding whether contextual differences exist, institutions can better strategize their resources for building and sustaining a culture of assessment. By having more information on cultures of assessment and differences present, resources can be allocated or maneuvered as needed to combat those potential differences. Overall, practitioners would have a better understanding of where to focus their resources in order to ensure the progress of institutional goals by having a deeper understanding of their organizations.

Definition of Terms

A number of terms were used in this study. In an effort to create a clear and concise understanding of what was meant when certain terms were used, specific terms were identified and defined. Below is a list of identified and defined terms used in this study.

Accreditation. This term refers to the quality review of institutions and programs in higher education. There are various distinctions of accreditors who provide accreditation. There are professional accreditors, who review the quality of certain programs at institutions nationwide. Then, there are regional accreditation organizations that oversee a specific region of the United States and all institutions within that specific region. Also, there are standards published by the Council for Advancement of Standards in Higher Education (CAS), which publishes guidelines by which student affairs/services personnel are highly encouraged to follow as a uniformed quality guide to the profession. For the purposes of this study, regional accreditation distinctions will be utilized since the nationwide division of oversight provides a well-defined geographic separation of regions. When referring to an accrediting agency, specific names of organizations will be used. In addition, utilizing regional accreditation boundaries to define the geographic regions in this study allots for the potential to provide further insight for future researchers interested in studying accreditation bodies and cultures of assessment.

Assessment. Banta and Palomba (2015) define assessment as "the process of providing credible evidence of resources, implementation actions, and outcomes, undertaken for the purpose of improving the effectiveness of instruction, programs, and services in higher education" (p. 2). Assessment is commonly required to satisfy external accountability measures imposed by state, federal, and regional agencies.

Culture of assessment. This study utilizes the definition provided by Fuller et al. (2016) to define a culture of assessment. Fuller et al. (2016) defined a culture of assessment as "institutional contexts supporting or hindering the integration of professional wisdom with the best available assessment data to support improved student outcomes or decision making" (p. 404). This definition was selected due to the strong alignment the definition has with Maki's (2010) *Principles of an Inclusive Commitment*, which served as the theoretical framework for this study.

Geographic region. This term refers to the area of the United States of America that the higher education institution is located. Regions were divided and modeled based on the six accreditation commissions that certify higher education institutions nationwide. See Table 1 for which states were included in each of the six regions.

Table 1

Regional Accrediting Commissions and the States Overseen

Region	*States*
Higher Learning Commission	Arizona, Arkansas, Colorado, Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, New Mexico, North Dakota, Ohio, Oklahoma, South Dakota, West Virginia, Wisconsin, Wyoming
Middle States Commission on Higher Education	Delaware, the District of Columbia, Maryland, New Jersey, New York, Pennsylvania
New England Commission of Higher Education	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont
Northwest Commission on Colleges and Universities	Alaska, Idaho, Montana, Nevada, Oregon, Utah, Washington
Southern Association of Colleges and Schools Commission on Colleges	Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, and Virginia
Western Association of Schools and Colleges	California, Hawaii

Note. Information from Regional Accrediting Organizations in the Council for Higher Education Accreditation, n.d., Retrieved on July 30, 2019, from https://www.chea.org/regional-accrediting-organizations-accreditor-type.

While the intention of geographic region as a dependent variable was to explore whether differences exist based on geographic region, utilizing accreditation regions provides an already established regional configuration. However, each region consists of states that are contiguous to each other allowing for the possibility of future research on specific geographic locations. This study did not seek to link geographic region to accreditation but utilized the accreditation structure for consistency purposes.

Institutional size. This term refers to the enrollment of universities and colleges. Larger enrollments typically require a larger campus or a larger payroll to assist the large population of students. Institutional sizes were divided based on the same enrollment breakdowns the National Center for Educational Statistics utilizes, which is: (a) *Less than 1,000 Students,* (b) *Between 1,000-4,999 Students,* (c) *Between 5,000-19,999 Students*, and (d) *20,000 or More Students* (McFarland et al., 2019).

Organizational culture. Culture will be defined as "the accumulated shared learning of that group as it solves its problems of external adaption and internal integration; which has worked well enough to be considered valid and therefore, to be taught to new members as the correct way to perceive, think, feel, and behave in relation to those problems" (Schein, 2017, p. 6).

Mid-Level student affairs employee. A mid-level employee has traditionally been known as an employee who has surpassed the entry level. Student affairs employees are typically those who provide services outside of the classroom. For the purposes of this study, data were only collected from personnel who ranked as a mid-level student affairs employee or higher.

Student affairs personnel. Student affairs personnel are employees who typically work in departments or areas who provide support services to students mostly outside of their scheduled classes. For the purposes of this study, only personnel in select departments will be considered student affairs personnel due to the tool selected to measure cultures of assessment in divisions of student affairs. Personnel employed in the following areas at an institution of higher education were identified as student affairs personnel: Academic advising, academic skills/tutoring/study skills, admissions, alumni services/relations, art and museum exhibits, assessment, athletics, bursar’s office, campus dining, campus safety, career development, community relations, commuter/off campus student services, dean of students office, disability support services, donor relations, enrollment management, financial aid, GLBTQI* support, government relations, graduate student services, Greek affairs, housing and residence life, international student services, leadership development programs, multicultural services/diversity advocacy, orientation, parking/transportation, police department, recreational sports, registrar’s office, service learning, student conduct/discipline, student health, student legal services, student records/data management, student unions, technology support, undergraduate student services, veterans’ affairs, vice president/central leadership office, university library, and women’s services.

Assumptions

Like all research, this study had various assumptions. This study utilized data collected from the *Student Affairs Survey of Assessment Culture* between 2013-2019 under the direction of Principal Investigator, Dr. Matthew Fuller at Sam Houston State University. The first assumption was that the *Student Affairs Survey of Assessment Culture* is a validated tool of measurement. This was assumed because the survey was descended from the *Administrators Survey of Assessment Culture* and the *Faculty Survey of Assessment Culture*. Moreover, all *Survey of Assessment Culture* instruments have undergone rigorous validation efforts. Validation efforts for the *Student Affairs Survey of Assessment Culture* are offered in Fuller and Lane's (2017) work. All surveys were derived and refined using expert support from Fuller's (2011) study of factors contributing to cultures of assessment via a stratified sample of nationwide leaders in higher education assessment. Additionally, the *Student Affairs Survey of Assessment Culture* has been reviewed and approved by the Sam Houston State University Institutional Review Board (Protocol Number 2013-08-11722). Data used for this study were collected annually by the Primary Investigator's staff, who have an established history of solid data collection efforts.

The second assumption was that all questionnaire respondents responded truthfully to questions asked. In an effort to preserve the integrity of participant responses, the survey administrator gave all participants notice that all responses would be anonymously recorded. Additionally, participants had the option to stop taking the survey at any time for whatever reason, such as comfort level or time constraints. Therefore, the researcher examined the data set for any missing data to address this assumption pending the Primary Investigator has not already done so.

The third assumption is that only personnel working in student affairs took the survey. Each participant was sent an email explaining that the individual and their institution were selected to participate in the *Student Affairs Survey of Assessment Culture*. Additionally, the initial email invitation explained to participants that they were being invited to take the survey as a student affairs staff member. However, at no point in data collection did the Principal Investigator ever learn of any instance wherein a participant in the survey was not a student affairs staff member.

The fourth assumption pertains to normal data management procedures. Particularly that data were transferred into SPSS correctly and have been confirmed and widely used in additional analyses. Since the Sam Houston State University Institutional Review Board approved the survey, the assumption that meticulous and methodical steps were taken when data were collected and transferred to SPSS is supported.

The last assumption pertains to the use of multivariate analysis of variance (MANOVA). There are statistical assumptions associated with the use of MANOVA. Those assumptions were thoroughly discussed in Chapter III.

Limitations

Limitations in a study seek to disclose information regarding any potential issues future researchers may have with duplicating this study (Johnson & Christensen, 2016). As with all studies, limitations are present. In an effort to divulge potential limitations, threats to both internal and external validity are discussed.

An internal validity issue present in this study is the result of utilizing secondary data. This study is based on data collected from the St*udent Affairs Survey of Assessment Culture*, which was collected between 2013 and 2019. Thus, the quality of data and researcher bias may be a limitation since data were collected prior to this study, by different researchers, and for more broad purposes than the present study. Despite this disclosure, the Principal Investigator has published numerous qualitative and quantitative studies on cultures of assessment using the *Student Affairs Survey of Assessment Culture*.

Attrition is another internal validity issue. Attrition refers to respondents not completing the method of measure in a study (Johnson & Christensen, 2016). In an effort to make respondents feel more comfortable with providing truthful answers, the Primary Investigator of the data allowed survey responders to leave the survey prior to full completion. Therefore, attrition may be a limitation in this study. To examine this concern, the researcher adhered to common, discipline-accepted guidelines on missing data.

Additionally, this study has some threats to external validity. External validity refers to the extent in which the findings of this study can be generalized (Johnson & Christensen, 2016). Threats are identified to inform others of the disclaimers pertaining to the study, but threats can often be controlled. The first threat was population validity. While the initial sample size was sufficient for the primary study, the same might not happen for this study. Once the sample size is distributed into each of the respective geographic region and institutional size categories, the data collected may not have samples large enough to make generalizations. Results from data analyzed were cautiously reviewed and discussed.

Ecology validity was also a threat. Ecology validity takes into consideration the settings of an institution (e.g., funding, support) (Johnson & Christensen, 2016). This study sought to identify differences in institutions based on the geographic region and institutional size, but no other data were sought as to why differences (if any) exist. However, the general ecology or makeup of an institution has the potential to create differences from one institution to another. An example would be an institution with a large amount of funds in one region could have access to resources for assessment purposes that another institution in the same geographic region may not have.

Reactivity was another limitation to this study. Reactivity refers to the survey responders knowing that they are part of a study and thus potentially answering differently than they normally would (Johnson & Christensen, 2016). To combat this threat, the Principal Investigator sent multiple emails conveying to each respondent that their responses would be confidential.

The last identified threat was temporal validity. Temporal validity refers to the generalization of findings from a study across time (Johnson & Christensen, 2016). As previously mentioned, secondary data were collected between 2013 and 2019. Since data were collected during a certain time frame, there is a possibility that additional trainings or other factors could have changed the perceptions of respondents assessed.

Delimitations

Delimitations are the boundaries set by the researcher conducting the study. The limitations previously discussed were issues that could happen but cannot be controlled. Delimitations, in contrast, are the limits the researcher places on their own research; choosing to do so to focus the research effort.

Research participants were the first delimitation. The Principal Investigator limited solicitation of survey completion to a specific population. In this case, the Principal Investigator solicited responses from mid-level personnel only in divisions of student affairs nationwide. Research participants were delimited to these specific circumstances to not only observe the student affairs population in question, but to also reach the mid-level personnel who are more likely to be charged with assessment efforts than entry-level personnel.

Geographic and institutional size parameters were also utilized. The parameters for geographic regions were based on the geographic boundaries associated with regional accreditation organizations. This method of delimitation was selected because data obtained came from a sample delineated from a list of accredited colleges and universities nationwide. By virtue of the manner in which the Principal Investigator sampled institutions for participation, all institutions must be accredited. In addition, geographic regions were based on the accrediting regions since there was a lack of sufficiently refined data available given that the *Student Affairs Survey of Assessment Culture* is a fairly new instrument.

The institutional size numeric categories were based on regularly applied breakdowns utilized by the Department of Education to define institutional size (McFarland et al., 2019). This breakdown was utilized due to the consistency of data collected by the Department of Education. All higher education institutions who are eligible for Title IV student financial aid programs are required to report their enrollment numbers to the Department of Education, thus increasing the reliability of data.

As previously indicated, numerous researchers have inquired into what factors are indicative of a culture of assessment. After careful review of the literature and methods, the *Assessment Culture Scales* were selected to measure cultures of assessment. Based on previous studies, the *Assessment Culture Scales* consisted of the following: (a) *Focus on Student Learning;* (b) *Fear or Distrust of Assessment*; (c) *Benefits of Assessment*; (d) *Clarity of Assessment Leadership*; (e) *Use of Assessment Data*; and (f) *Sharing*

Assessment Results (Fuller, 2013; Fuller & Lane, 2017; Fuller & Skidmore, 2014; Fuller et al., 2016). The *Assessment Culture Scales* were previously identified and developed by researchers after numerous studies (Fuller, 2013; Fuller & Lane, 2017; Fuller & Skidmore, 2014; Fuller et al., 2016) and consisted of factors other researchers had also identified as contributing to assessment culture (Green et al., 2008; Grunwald & Peterson, 2003; Kezar, 2012; Rosaen et al., 2013; Schuh, 2013; Seagraves & Dean, 2010; Slager & Oaks, 2013).

Conclusion

Developing and sustaining a culture of assessment was identified as a key component for establishing the best practices possible to support student learning in higher education. While researchers have studied the internal components necessary to build a culture of assessment, there was an identified gap in the literature in whether differences were present in cultures of assessment as a function of external factors (i.e., outside of the organization's culture). As discussed by Schein (2017), the culture of an organization is formed and adapted from the existence of external pressures. With this in mind, this study was designed to provide insight into what differences were present in student affairs assessment culture when observed by institutional size and geographic region.

In Chapter I, a brief overview of the importance of assessment and cultures of assessment in higher education were discussed along with relevant background information and the rationality and structure for the study. In Chapter II, an overview of literature pertaining to theoretical framework, organizational culture, student affairs and assessment, cultures of assessment, and contextual factors were discussed. A presentation of the methods used in this study including participants, ethical considerations, instruments, procedures, data analysis, and the delineation of findings was provided in Chapter III. Chapters IV detailed the analyses conducted and a description of findings yielded, while interpretations and implications of the findings were discussed in Chapter V.

CHAPTER II

Review of the Literature

A thorough investigation was conducted into locating scholarly research for this study. While a great deal of research has been conducted on assessment in general, locating sources specifically on cultures of assessment was difficult. The task of finding sources on student affairs and cultures of assessment was even more challenging. Steps taken to locate research on this subject matter indicated that more contextual research was needed to provide a better understanding of student affairs assessment culture and contextual factors. A review of the literature included the following sections: (a) a description of how sources were discovered and located; (b) a discussion on the theoretical framework selected for this study; (c) a review of organizational culture in higher education; (d) a brief overview of the history of assessment in divisions of student affairs; (e) an examination of literature on the importance of assessment in higher education and in student affairs, and the potential benefits of creating an environment that promotes and integrates assessment; (f) an introduction of assessment culture in academic affairs and in student affairs organized by the research methods used (i.e., qualitative and quantitative); (g) a review of how institutional size and geographic region may impact institutional decision-making and culture; and (h) a summary and conclusion of the chapter.

Search Description

A search for applicable literature published after 2009 was conducted by entering multiple keywords into multiple databases. The following keywords were searched in JSTOR, SAGE, and Academic Search Complete: (a) *culture of assessment*; (b) *culture of* *assessment in student affairs*; (c) *student affairs assessment*; (d) *organizational culture in higher education*; and (e) *history of student affairs assessment*. The results yielded were displayed in Table 2 below.

Table 2

Search Engine and Keyword Results

Search Engine	*Keywords*	*Results*
JSTOR	Culture of Assessment	6,300
	Culture of Assessment in Student Affairs	715
	Student Affairs Assessment	1,084
	Organizational Culture in Higher Education	1,829
	History of Student Affairs Assessment	698
SAGE	Culture of Assessment	9
	Culture of Assessment in Student Affairs	301
	Student Affairs Assessment	1,133
	Organizational Culture in Higher Education	1,052
	History of Student Affairs Assessment	251
Academic Search Complete	Culture of Assessment	29
	Culture of Assessment in Student Affairs	2
	Student Affairs Assessment	9
	Organizational Culture in Higher Education	25
	History of Student Affairs Assessment	2

Note. Results yielded constituted total results and were narrowed based on articles written since 2009 and by subject (i.e., Education for JSTOR and SAGE; Higher Education for Academic Search Complete).

The results yielded from these searches varied drastically. The number of published works yielded from JSTOR and SAGE were significantly higher than those yielded from Academic Search Complete. Most notably though, the results from Academic Search Complete were more directly applicable to the subject at hand versus those found in JSTOR and SAGE.

Once the searches were vetted, a determination to expand the search beyond 2009 was made due to a lack of research. While more articles were found, more research was still needed. The search was then moved to Google Scholar, where the same terms were searched. Throughout all stages of the search, the sources for each of the articles found were mined for additional literature. Overall, research results on the topic of *cultures of assessment* were lacking. Furthermore, research studies on *cultures of assessment in student affairs* were almost nonexistent. Therefore, literature regarding *student affairs assessment* was used to supplement the literature gap.

Theoretical Framework

Research on cultures of assessment in higher education has continued to progress while strides to ascertain a suitable framework for research on assessment culture were ongoing. The majority of the literature reviewed on *cultures of assessment* did not provide theoretical frameworks. In fact, Fuller et al., (2015) discovered a notable dearth of conceptual frameworks guiding assessment leader practices. However, there were a few scholars (Farkas, 2013; Fuller, 2011; Fuller, 2013; Fuller & Skidmore, 2014; Fuller et al., 2016; Holzweiss et al., 2016; Lane et al., 2014; Skidmore et al., 2018) who studied cultures of assessment using viable theoretical frameworks that were taken into considered when this study was conducted.

Of the few researchers who incorporated a theoretical framework into their studies, Lane et al. (2014) and Farkas (2013) utilized *Kotter's Eight-Step Change Model* when assessing their respective organizations. The model divides the eight-steps into three phases: conditions for change, involving and helping the organizations, and establishing and maintaining the change newly implemented (Farkas, 2013). *Kotter's Eight-Step Change Mode*l explained that practitioners needed to "establish a sense of urgency, form a guiding coalition, create a vision, communicate a vision, empower others to act on the vision, plan for and creating short-term wins, consolidate improvements to create more change, and institutionalize new approaches" (Farkas, 2013, p. 17).

Both researchers conducted case studies and noted the actions that their respective organizations took to achieve the steps and both noted positive outcomes when discussing their organization's shift to a culture of assessment. However, both studies indicated that there were rising concerns about accreditation and accountability, which was what fueled a sense of urgency as described in Kotter's model. The reservation developed from that consensus was whether a culture can be sustained once the sense of urgency departs. Once faculty and staff were not threatened with being reprimanded or the sense of urgency dissipates, assessment efforts were not likely to persist outside of internal and external compliance.

As discussed and defined in Chapter I, the theoretical framework utilized for this study is Maki's (2010) *Principles of an Inclusive Commitment*, which has also been used by numerous scholars when studying cultures of assessment (Fuller, 2011; Fuller, 2013; Fuller & Skidmore, 2014; Fuller et al., 2016; Holzweiss et al., 2016; Skidmore et al., 2018). Maki's (2010) framework takes a more intrinsic approach by advocating for organizations to develop a commitment to conducting assessment for the purposes of improving student learning. Maki (2010) also took into consideration the "urgency" aspect of assessment and instead proposed that assessment be incorporated into the habitual routines of faculty, staff, and students. By dissolving the need for urgency, an organization would be able to make informed changes as needed rather than make forced changes that may not be as informed. Essentially, the motivation to change to a culture of assessment is different when Maki's (2010) *Principles of an Inclusive Commitment* were considered and may sustain assessment culture longer than an organization utilizing *Kotter's Eight-Step Change Model.*

This study focused on divisions of student affairs. The main goal of a student affairs professional should be to develop students holistically outside of the classroom. Outside of the classroom can consist of many areas: money management, engagement, school spirit, advising, mentoring, leadership, physical and mental health, interpersonal skills, and other various support services. With student affairs professionals in mind, Kotter's model is centered around change, whereas Maki's framework is centered around improving student learning. Assessment focused on student learning is far more applicable to divisions of student affairs.

Organizational Culture in Higher Education

In this study, cultures of assessment in student affairs were explored, but understanding the significance and applicability of organizational culture in higher education was also important to discuss. Research into organizational culture can be traced back to 1951, when Elliott Jacques wrote *The Changing Culture of a Factory* (Hatch, 1993). However, the study and widespread applicability of organizational culture was not prominent until the 1980s when researcher Edgar Schein developed a framework for how organizational culture existed and developed and how culture could be altered when needed (Hatch, 1993; Schein, 2017). Schein (2017) described culture in an organization "as what the group has learned in its efforts to survive, grow, deal with its external environment, and organize itself" (pp. 14-15). Tierney (1988) explained that "an organization's culture is reflected in what is done, how it is done, and who is involved in doing it" (p. 3). Culture can be expressed through artifacts, values, and assumptions either on display or inherent to an organization (Schein, 2017). Using this context, researchers have explored the usefulness of organizational culture in higher education in an effort to combat the ever-changing internal and external political and economic climates.

Cameron (1984) explored how to higher education institutions responded to calls for change in wake of demands for reform. The researcher investigated culture changes at liberal arts institutions and what benefits and challenges arose. Cameron (1984) stressed that organizational adaptation is critical since the format allows areas to adapt to different external impacts associated with higher education such as government entities, local communities, and accreditation boards. The researcher also discussed various types of adaptation with some requiring minimal manager impact, while others requiring significant managerial impact. Cameron (1984) insisted that both minimally impactful managers and highly impactful managers were required for institutions of higher education to conform and successfully implement a new and improved organizational culture. In addition, Cameron (1984) stressed the importance of managerial involvement and influence when conforming to a new organizational culture in higher education.

Similar to Cameron (1984), Tierney (1988) also advocated for higher education administrators to consider the possibility for advancement once they were able to understand their own organizational culture. Tierney (1988) discussed the benefits of administrators utilizing organizational culture in their leadership practices and then investigated a practical framework that would be prove useful for administrators in higher education by providing a case study. Even through the admittance of numerous external factors, Tierney (1988) suggested that the thorough understanding of the culture by an administrator could lead to more innovative solutions to problems that arise, further making the institution a more fluid place.

The author used a case study that involved a university president who was described as being informal, while the organizational constituents were described as having a great deal of communication from the president. Tierney (1988) used the examples of how a university president consistently hosted meetings in the same place and time, and how information was shared as identifiers for how university space, time, and communication were cultivated. Essentially, the researcher explained how the administration could actively create and alter a campus culture by their mere actions and communication. Tierney (1988) stressed the need for more research into higher education organizational culture and the need for the development of measuring tools to assess organizational cultures.

As discussed previously in this literature review, the 1990s brought along increased oversight, which resulted in a higher demand for accountability. During this time, many researchers began accepting and incorporating organizational culture into their studies and encouraging leadership in higher education to do the same (Cameron, 1984; Fjortoft & Smart, 1994; Sporn, 1996; Tierney, 1988). There was then a shift in research, where researchers began to assess organizational culture in higher education and the relationship that the culture had with institutional effectiveness including leadership and decision-making (Fjortoft & Smart, 1994; Sporn, 1996).

Fjortoft and Smart (1994) studied the how institutional organizational culture and mission agreement individually influenced organizational effectiveness at universities and colleges (i.e., 4-year and 2-year). The researchers looked at 334 higher education institutions across the country, with an average response rate of 10 people per institution. Fjortoft and Smart (1994) then conducted a multivariate analysis of covariance to evaluate data collected. The researchers found that respondents were more likely to respond that their institution had high institutional effectiveness when there was a high congruency between their institutional mission statement and their organization's culture. Additionally, Fjortoft and Smart (1994) recommended a higher level of communication be established on an informal level so that employees would be more likely to not only contribute more to campus goals, but also so that acceptance and buy-in were more likely to ensue. The investigators placed high importance on respondent perceptions, because the perceptions of staff at the institution have an impact on the organizational culture, decision-making, and place great influence on the future path of the overall institution.

Similarly, Sporn (1996) determined the fundamentals of the correlation between the culture a campus has and the management styles that exist. Sporn (1996) proposed a model using identified fundamentals to gauge what kind of management style would best fit a particular institution of higher education. The scholar conducted this study by using a mixed methods research design.

Sporn (1996) identified four types of culture based on the findings associated with the study: weak, internally focused; weak with external alignment; strong, internally focused; and, strong with external alignment. Weak, internally focused organizations were composed of people who did not buy-in to university goals and thus were focused on their own internal interests and areas. Thereby making that kind of organization the hardest to work with in terms of changing policies. Weak with external alignment culture was composed of people who did not buy-in to university goals but tended to be externally focused. Strong, but internally focused cultures consisted of people who had buy-in to university goals and other internal issues but tended to weaken as changes progressed from external forces. Of the four identified cultures, the strong with external alignment was described as the ideal culture to achieve and maintain. Institutions that were strong with external alignment tended to be more fluid and adaptable to varying internal and external situations, because the majority of their organization were aligned with the values and goals of the institution.

Smart et al. (1997) conducted a similar study to Fjortoft and Smart (1994) and Sporn (1996), but instead focused on a different kind of institution. Smart et al. (1997) studied 2-year colleges and how organizational culture and the decision-making process influenced organizational effectiveness. The research was crucial, because 2-year colleges makeup a large portion of the higher education population. In addition, the nature of a 2-year college can be different because the institutions are typically in smaller communities and engage more local stakeholders, who typically have more political influence with elections, bonds, etc. The researchers took a stratified sample of public 2-year colleges that reported to the Accrediting Commission for Community and Junior Colleges. Using a total sample of 30 institutions, Smart et al. (1997) utilized Cameron's nine dimensions of organizational effectiveness to conduct a causal model in an effort to see the relationship between organizational effectiveness and decision-making and organizational culture. The researchers found that 2-year institutions that had cultures that promoted adaptive and participative standards were more likely to have successful institutional effectiveness as opposed to cultures that were merely compliant. In addition, Smart et al. (1997) found that leaders who make decisions while understanding their campus culture, were more likely to succeed than those who did not.

Overall, researchers have indicated that administrators having a thorough understanding of their organization's culture is imperative for their success (Cameron, 1984; Fjortoft & Smart, 1994; Hatch, 1993; Schein, 2017; Smart et al., 1997; Sporn, 1996; Tierney, 1988). Institutions with administrators that communicated and included others in their decision-making process tended to be more adaptable, which created a better culture for combating ever-changing external and internal factors (Cameron, 1984; Fjortoft & Smart, 1994; Smart et al., 1997; Sporn, 1996). Thus, if understanding the culture of an institution helps administrators make more informed decisions, there is the potential that understanding subcultures (e.g. cultures of assessment) within an institution could benefit administrators further.

History of Calls for Assessment in Student Affairs

Universities and colleges have been operating in the United States for hundreds of years, with the first documented strides of student affairs recorded at Harvard University as far back as 1636 when it was founded (Henning, 2016; Schuh & Gansemer-Topf, 2010). As previously discussed in Chapter I, assessment has been present in higher education for over 100 years, but assessment in student affairs is much newer (Henning, 2016; Schuh & Gansemer-Topf, 2010; Shavelson, 2007). Between the external pressures from students, parents, community stakeholders, government oversight, and accrediting boards and then the internal influences of scarce resources and evidence-based culture, assessment in student affairs has become a necessary function for the validity of the profession in the future (Henning, 2016; Schuh & Gansemer-Topf, 2010; Seagraves & Dean, 2010). Divisions of Student Affairs did not arrive to this dire need for assessment overnight. The need for student affairs involvement in assessment has been a long time coming.

In 1937, the American Council on Education published *The Student Personnel Point of View* (American Council on Education, 1937). The Council discussed that the purpose of higher education was the "development of the student as a person rather than upon his intellectual training alone" (American Council on Education, 1937, p. 3). Student affairs has typically provided services and help outside of the intellectual training that occurs in the classroom, which further boasts the importance of the work of student affairs. Among the many recommendations discussed in the article, the Council encouraged people in the field to begin collecting data and feedback for evaluation (American Council on Education, 1937; Henning, 2016; Seagraves & Dean, 2010).

While evaluation and assessment are not interchangeable, the request was important because student affairs personnel were asked to begin reviewing their work and documenting their efforts. In addition, the Council requested that student personnel coordinate their work with professors, the institution, and any other outside entities (e.g., secondary education, higher education, NASPA) to exchange valuable information and results regarding the students they service (American Council on Education, 1937). Thus, data collected from student affairs personnel could contribute to not only internal entities, but external as well. The most critical part of the Council's work was their call for research. The Council explained that:

> College students spend the majority of their time outside the classroom and laboratories. We have, however, no significant data as to the activities in which they engage. In order to understand the educational importance of their activities we propose that on a score of campuses through the country data be collected. Incidentally, the research would be relatively inexpensive since on every campus individuals may be found to do the work without compensation. (American Council on Education, 1937, p. 10)

In declaring this statement, the Council acknowledged that a large part of the student experience occurs outside of the classroom where little was known. The Council also alluded to the importance of the collection of data for assessing the contributions of student affairs personnel to the college student experience. In addition, the statement set a standard of expectation and culture when the Council suggested data collection be done by individuals already in the field and without compensation.

In a follow-up meeting of the American Council on Education Studies in 1949, the Council published an updated *The Student Personnel Point of View* (American Council on Education, 1949; Henning, 2016; Schuh & Gansemer-Topf, 2010; Seagraves & Dean, 2010). The document discussed numerous updates from the previously released version, but consistently discussed the need for evaluation. Specifically, the Council established that the "principal responsibility of all personnel workers lies in the area of progressive program development" (American Council on Education, 1949, Criteria for Evaluating Program section, para. 1). In making this statement, the Council called upon student personnel to "be thoroughly trained in research methods as a part of their professional preparation" (American Council on Education, 1949, p. 33). However, caution was urged that without the proper documentation of efforts being made, the efforts would "deteriorate into ritual observance" (American Council on Education, 1949, p. 33). Additionally, practitioners were encouraged to assess student and faculty satisfaction, the utilization of student services, training and development for student personnel, and the staff, faculty, student relations (American Council on Education, 1949; Henning, 2016).

After the American Council on Education hosted meetings and released various documents, assessment in student affairs was relatively quiet until the 1960s and 1970s. In the 1960s, student development theories began to emerge through the assessment of student perceptions (Henning, 2016). With the creation of student development theories, new opportunities for assessing student perceptions were available. Within the next couple of decades, the Council for the Advancement of Standards in Higher Education (CAS) was created in 1979 (Henning, 2016). The formation of CAS provided student affairs with necessary criteria, guidelines, and education for performing assessment, and "the first set of standards for 16 functional areas and graduate professional programs" (Henning, 2016, p. 3).

Exactly half a century after the 1937 *The Student Personnel Point of View* debuted, NASPA released a follow-up statement called *A Perspective on Student Affairs* (Elkins, 2015; Henning, 2016; National Association of Student Personnel Administrators, 1987; Schuh & Gansemer-Topf, 2010). In the released literature, there was a renewed request for student affairs staff to be the campus experts regarding students and their settings. In doing so, student affairs staff were expected to "assess the educational and social experiences of students to improve institutional programs" (National Association of Student Personnel Administrators, 1987, p. 12). At that point in history, staff were to "provide and interpret information about students during development and modification of institutional policies, services, and practices (National Association of Student Personnel Administrators, 1987, p. 12). As a result, numerous studies and books on how to conduct assessment in student affairs were written in the 1990s (Aloi, Green, & Jones, 2007; Ewell, 2002).

In the 1990s, many researchers and organizations began releasing documents and information to help student affairs practitioners incorporate assessment into their daily activities (Aloi et al., 2007; Ewell, 2002; Henning, 2016; Schuh & Gansemer-Topf, 2010; Seagraves & Dean, 2010). Similarly, assessment, in general, experienced a proliferation in higher education institutions (Ewell, 2002). The rise in literature on assessment in the 1990s stemmed from the many demands for higher accountability from external government and accrediting entities, and the internal pressures of securing limited resources (Elkins, 2015; Seagraves & Dean, 2010). With the political shift to more oversight sweeping the nation during the 1990s, student affairs professionals were pressured to show data supporting their impact on college campuses.

The most noteworthy of the documents released in the 1990s regarding assessment in student affairs was the publication of the 1996 *The Student Learning Imperative* by ACPA (Schuh & Gansemer-Topf, 2010; Seagraves & Dean, 2010). Seagraves and Dean (2010) saw the release of *The Student Learning Imperative* as the first call to action that people in the student affairs field actually answered by taking responsibility for their part in assessment practices on campus and performing outcomes-based assessment. Essentially, *The Student Learning Imperative* warned student affairs professionals of the need for higher accountability and documenting their efforts to secure and earn their place on college campuses (American College Personnel Association, 1996; Schuh & Gansemer-Topf, 2010; Seagraves & Dean, 2010).

The warning from ACPA came from growing concerns that resources had become scarce, internal and external accountability measures were heightened, and the negative perception that student affairs staff were not contributing to student learning (Schuh & Gansemer-Topf, 2010; Seagraves & Dean, 2010). These calls for action not only began to engage student affairs personnel into assessment, but also encouraged student affairs personnel to be more intentional with their assessment efforts to enhance student learning (Aloi et al., 2007). Elkins (2015) described these documents as a plea for "student affairs professionals to take active responsibility for student learning, as opposed to limiting their role to the provision of services and programs" (p. 40).

In the 2000s, researchers continued to publish papers and books with more and more clarification on the guidelines associated with assessment in student affairs (Henning, 2016). In addition, the two leading student affairs professional organizations (i.e., NASPA and ACPA) hosted a variety of conferences and workshops, while also releasing competencies for the profession to help guide practitioners in the field. In 2004, both NASPA and ACPA recognized a communal need to educate the profession on assessment and opted to release a joint plea called *Learning Reconsidered: A Campus-Wide Focus on the Student Experience* (National Association of Student Personnel Administrators & American College Personnel Association, 2004). The organizations urged practitioners to “lead broad, collaborative institutional efforts to assess overall student learning and to track, document, and evaluate the role of diverse learning experiences in achieving comprehensive college learning outcomes” (National Association of Student Personnel Administrators & American College Personnel Association, 2004, p. 26).

For the first time, the highly regarded professional associations began to indicate the need for student affairs professionals to look beyond individuals conducting assessment and into something more when they stressed that “assessment should be a way of life—part of the institutional culture” (National Association of Student Personnel Administrators & American College Personnel Association, 2004, p. 26). The associations thereby indirectly identified the need to investigate assessment as part of institutional culture, which was a deviation from previous requests for individuals to conduct assessment. These developments aided the progression of assessment by encouraging student affairs personnel to create assessment beyond that of attendance rates and satisfaction surveys (Aloi et al., 2007; Elkins, 2015; Schuh & Gansemer-Topf, 2010).

Since the early 2000s, student affairs personnel have been called upon to formally perform assessment for both internal and external entities. However, given the historical chain of events that have been reviewed, the uncertainty of student affairs and assessment is still prevalent if one were to factor in that over 30 years ago, the guiding professional associations called for more assessment from the profession and yet issues are still prominent. Elkins (2015) explained that "our limited commitment to assessment stems from a lack of willingness to claim responsibility for student learning and make its assessment a priority for our work" (p. 46). This study aims to explore how a culture of assessment could potentially accelerate student affairs into the right direction.

Perceptions of Assessment Leading to a Culture of Assessment

These articles investigated what factors contribute to better assessment practices in higher education. The research ultimately ties into what makes people at higher education institutions want to conduct effective assessment practices. As mentioned earlier in this literature review, it is important to understand what people are doing, how they do it, and why they do it so that the culture can be fully comprehended. The following studies were divided based on whether researchers focused on the higher education in general, academic affairs, or student affairs.

Higher education. Shipman et al. (2003) studied the challenges associated with assessment in higher education and specifically focused on the key challenges that should be addressed in order to better assessment practices in the future. Securing resources from the administration for assessment purposes was identified as a major challenge for institutions and personnel in higher education. Shipman et al. (2003) stressed the importance of administrative support for assessment, whether this included funding, technical help, or human support. Recommendations included the continual assessment-related developmental classes for the faculty, whether they be internal or external, to better serve the campus needs. A reward and acknowledgment program were also suggested as a technique for faculty support. Moreover, Shipman et al. (2003) recognized student-learning outcomes as a challenge for higher education institutions. Specifically, student-learning outcomes are sometimes rarely used, and when they are used, they are either not measured properly or no action is taken with the gathered data. The investigators stressed the need for the education and development of efficient tools for measuring student-learning outcomes so that data collected do not produce false results via wasted resources. Shipman et al. (2003) recommended institutions develop various initiatives, reward programs, and support in an effort to encourage meaningful assessment practices.

Similar to Shipman et al. (2003), Kezar (2012) sought to identify the key issues concerning how institutions of higher education view student learning outcomes assessment and potential ways to solve those issues. To do so, Kezar (2012) compiled data already collected from an extensive review of literature and synthesized what was already known, what can be altered, and what can be learned. Kezar (2012) also acknowledged the need for assessment, but noted that external factors such as accreditation and governmental mandates are a necessity to the institution as a whole, but not a motivator to campus constituents.

The scholar specifically identified the following four areas as being crucial to the motivation of student assessment: rewards, culture, governance, and resources. While a small amount of research indicated that rewards were beneficial, the resources to apply such a model to institutions was often lacking. Additionally, culture was often studied by scholars, but not usually defined and was usually studied on a case study basis, which lacked generally applied results. In addition, governance was reviewed in numerous studies, but was often viewed in a small-scoped capacity where numerous kinds of leadership could not be applied, only generalized. Resources, similar to rewards, were often found to have the potential to be helpful, but lacked funding. While the four areas are crucial to the study of how institutions of higher education carry out student learning assessment outcomes, much more research is needed. The bulk of the literature in the field indicates that most studies pertain to self-reported data from either faculty, staff, or institutions. Kezar (2012) urged future scholars to attain data via observation or utilize other sources outside of the institution itself. In doing so, data collected will provide a more neutral perspective versus data collected from within the institution itself, thereby allowing examiners to compare data from similar institutions.

Walser (2015) explored evaluability assessment as an approach to enhance assessments conducted on campus while also addressing the needs of accountability, and the impact evaluability assessment could have on creating a culture of assessment. Two exploration efforts were commenced to test evaluability assessment: the first pertained to the Professional Development System and the second was an evaluation of the Educational Leadership Doctoral Program. Walser (2015) determined that evaluability assessment addressed accountability needs while providing results that allotted for improvements because of the assessment conducted. Furthermore, Walser (2015) found evidence of a positive impact evaluability assessment had on supporting a culture of assessment in both exploration efforts including participant involvement across the board, need-based assessment, and actually making adjustments based on the findings of the assessment.

Academic affairs. As mentioned previously, assessment has been present in academic affairs longer than student affairs. As such, various scholars have investigated how and why certain factors make a difference on faculty and their commitment to assessment (Grunwald & Peterson, 2003; Rosaen et al., 2013; Wang & Hurley, 2012). Though many scholars had similar findings, those similarities indicate a pattern of behavior associated with encouraging effective assessment practices associated with a culture of assessment (Grunwald & Peterson, 2003; Rosaen et al., 2013; Wang & Hurley, 2012).

Grunwald and Peterson (2003) studied how institutions promote faculty satisfaction and participation as it pertained to student assessment. The perspectives of faculty members on student assessment were assessed at seven different institutions. The overall intent of conducting the study was to observe what institutional factors and implementations fueled higher faculty involvement and satisfaction with student assessment. Grunwald and Peterson (2003) collected data via a survey with the majority of the questions being in Likert-style format. Approximately three out of 10 faculty who received the survey completed and submitted the survey. Once surveys were received, a factor analysis was commenced on data received. The results found indicated that faculty are more likely to be satisfied with student assessment at their institution when the administration and managers encouraged the use of student assessment as a means for improving student learning. In addition, Grunwald and Peterson (2003) found that satisfaction increased when resources were earmarked for student assessment development and assessment was included in university policies and plans.

Like Grunwald and Peterson (2003), Rosaen et al. (2013) explored what motivates faculty to practice assessment regularly. Rosaen et al. (2013) investigated whether the usage of a meta-assessment to help promote educational assessment to faculty would increase faculty assessment efforts on campus. A survey was distributed at a single institution of higher education by selecting two groups: the communications faculty (i.e., test group) and the English faculty (i.e., the control group).

The communications faculty participants were highly encouraged to go to the assessment seminar, while the English faculty were not. Both faculty departments had approximately a 40-50% participation rate. Each department was given a perception of educational assessment survey three times: prior to communication faculty attending the seminar, a week after the seminar, and then a month after the seminar. Rosaen et al. (2013) found that the communications faculty were more likely to have a positive attitude, self-assurance, and a better comprehension of assessment as opposed to their controlled counterparts in the English department.

While the surveys showed that these initial findings did disseminate over time, Rosaen et al. (2013) recommended frequent seminars to keep interest and understanding current. In addition, they found that giving the communications faculty the ability to express freely their positive and negative concerns along with critique of assessment, allowed for an overall positive experience. Rosaen et al. (2013) attributed the experience of loosened expression as a way that faculty were able to express any built-up hostility towards to the subject matter. By the faculty expressing themselves freely in the initial phase of the seminar, they allowed themselves to be able to receive the rest of the information at the seminar with an open mind knowing that their opinions were heard.

Wang and Hurley (2012) also studied how much the level of engagement that faculty set forth was related to their dedication of time, perception of their present culture of assessment, inclination to conduct student assessment, and opinion on the validity of scholarly assessment. To conduct this study, a 64-item survey was distributed to the faculty at a Midwestern liberal arts college. Upon distribution of the survey, approximately 53% of the faculty submitted responses. The results of the analysis conducted determined that faculty valued the rewards and scholarship of assessment over their time and the culture of the institution. Wang and Hurley (2012) found that faculty preferred to be motivated and acknowledged because of their work on student learning assessment as opposed to being forced to conduct the measures.

Student affairs. As previously discussed, most assessment strides have been associated with faculty and academic affairs. The literature was somewhat lacking in terms of assessing the perceptions of staff in the student affairs arena. While some scholars have indicated the need for more exploration into the perceptions of assessment in student affairs (Banta & Kuh, 1998; Green et al., 2008; Peterson & Augustine, 2000), others have actually assessed the perceptions of student affairs personnel (Elkins, 2015; Fuller & Lane, 2017; Seagraves & Dean, 2010; Slager & Oaks, 2013).

Banta and Kuh (1998) discussed the crucial need for faculty and student affairs personnel to begin working together to further understand students, achieve meaningful assessment results, and use those results to drive the improvement of the overall student college experience. The writers point out that faculty are more likely to have the knowledge of how to use assessment thoroughly and would be able to contribute that knowledge to student affairs professionals. Transversely, student affairs professionals are more knowledgeable about the current college student and are able to bring that knowledge to the faculty. Banta and Kuh (1998) conducted an exhaustive review of how student affairs professionals and faculty were able to work together successfully, to achieve results that help improve their respective institutions. One recommendation was that the administration should be supportive of both the academic and student affairs sides and give acknowledgments and rewards to those conducting collaborative assessment. In addition, Banta and Kuh (1998) recommended a congruency between the two areas regarding student development goals and how curriculum and assessment would achieve those goals. Overall, the researchers recommended that administrators use student assessment results to improve the overall college student experience.

While Peterson and Augustine (2000) mainly focused on academic affairs, data yielded in the study had implications for student affairs as well. The investigators researched the impact of student assessment on campus decision-making pertaining to academic affairs to view how institutions used assessment for institutional enhancement. An extensive literature review was conducted on student assessment to create a survey tool that was distributed to administrators at various universities as a pilot test. Once adjustments were made, the survey was distributed to universities across the country with a completed response rate of approximately 55%. Peterson and Augustine (2000) determined that higher education institutions were not likely to use student assessment data in their decision-making process, especially regarding faculty-related issues. However, institutions where student affairs personnel were involved in student assessment were more likely to be committed to assessment than institutions without student affairs involvement. In addition, institutions where accreditation was of high importance were more likely to not use student assessment results in their decision-making process.

Specifically pertaining to perceptions on assessment in student affairs, Green et al. (2008) conducted a qualitative study regarding how divisions of student affairs conduct assessment across three different universities. Institutions with a long record of accomplishment for conducting student assessment were targeted for this study. During the interview process, each institution's personnel were asked six questions pertaining to student assessment. Explanations for the following were sought: (a) who conducted assessment and what was done, (b) student learning outcomes, (c) how outcomes were measured, (d) collaboration process, (e) any influence, and (f) the advantages and disadvantages of the whole process.

Green et al. (2008) hosted interviews with numerous personnel at each of the three universities to gather data for this study. To obtain an overall idea of the mindset at each of the institutions, the researchers interviewed people from across the spectrum—at least one administrator, one person who oversaw assessment, three assessment committee members, and three staff members who ranged from manager to non-managerial status. Additionally, documents from previous assessments and other archival data, such as plans and case studies previously held, were used. Green et al. (2008) found that assessment must be supported by the administration in order to be successful.

Furthermore, a culture of assessment did not have to be present for a division of student affairs to produce assessment in a successful manner if enough decentralization of departments occurred within the division. Moreover, divisions of student affairs were more likely to be successful when there was an administrator dedicated solely to conducting, leading, and engaging the entire division on assessment. The following recommendations were made: (a) establishment of congruence between the division's goals and the overall institution's goals, (b) continuous professional development, and (c) numerous avenues for how student affairs could conduct assessment aside from the frequently used survey method.

Unlike previous research reviewed, Elkins (2015) discussed divisions of student affairs and their history with assessment, their current use of assessment, and the future of assessment in student affairs. Elkins (2015) described the history of assessment in student affairs as developing from the 1980s and expanded from there. The development of assessment in student affairs eventually led to various offices and personnel specifically dedicated to assessment in an effort to meet accreditation demands and set student-learning outcomes.

While many universities have successfully conducted assessment in student affairs, there was still a large demand for more information on the topic of student learning assessment, which demonstrated the need for more work surrounding assessment. Elkins (2015) specifically referred to data that suggested that student affairs professionals were still hesitant to conduct assessment after three decades of being charged to do so. The lack of responsibility for student learning was identified as an issue to be mediated so that divisions of student affairs could begin taking assessment seriously. Elkins (2015) pleaded for administrators to consider making assessment a regularly scheduled component or daily duty. Also, student affairs personnel were recommended to take responsibility for student learning associated with their respective areas, and to develop assessment partnerships with those in academic affairs. A noteworthy observation of Elkins (2015) is that divisions of student affairs were less likely to be committed to assessment than some of the individual departments, which could be related to a lack of inclusion in the assessment process due to campus assessment culture.

In an attempt to make assessment more appealing to those in student affairs, Slager and Oaks (2013) investigated a self-reported case study of how they strategically implemented a coaching model for assessment within the division of student affairs. The investigators conducted the study at The Ohio State University, which was one of the top five largest universities in the nation and located in the Midwest. The case study was based on the Center for the Study of Student Life, which assigned two assessment coaches to over 30 departments in student life to help them plan, facilitate, and disburse assessments pertaining to their respective areas. The availability of assessment coaches allowed the departments to have a greater understanding of assessment and the available resource of having personnel dedicated to helping design and implement assessment in copious way.

Slager and Oaks (2013) gave various recommendations for how their model was effective. Language commonly used within the department was utilized to help departmental personnel comprehend how to conduct assessment. Slager and Oaks (2013) also explained that the coaches listened to stakeholders from each department to understand what was wanted, what they were looking for, and what challenges and strengths were present. Furthermore, assessment was not only placed on the coaches, but in a joint collaboration between personnel and the coaches. Moreover, practical assessment was stressed to student affairs personnel so that adequate resources such as funding, time, and effort could be evenly spread and effectively used. Finally, the use of a rewards and an acknowledgement system along with helpful customer service were applied. The use of rewards motivated the departments to complete their assessment endeavors, while the coaches maintaining quality customer service throughout the assessment process allowed personnel to conduct the process with limited detriment or intimidation. While Slager and Oaks (2013) observed successful outcomes from an administration hiring two assessment coaches, duplicating a similar model might prove difficult for smaller institutions or those lacking the resources to hire two full-time employees designated completely to assessment.

Of the studies reviewed in this section, various similarities were observed. The presence of benefits, student learning, leadership, use of data, and dissemination of assessment all appear to be important to those in academic affairs and in student affairs (Banta & Kuh, 1998; Green et al., 2008; Grunwald & Peterson, 2003; Kezar, 2012; Peterson & Augustine, 2000; Rosaen et al., 2013; Shipman et al., 2003; Walser, 2015; Wang & Hurley, 2012). The commonality of the aspects listed above was that they were centered on assessment making things better for all stakeholders. Essentially, those who create assessment want to know that the results will actually be communicated and used to promote student learning by leadership who will reward them for their efforts without the potential of reproach. More importantly, these commonalities also indicated the potential for one instrument to have the capabilities to measure cultures of assessment regardless of the subculture being studied. With those commonalities in mind, the exploration into what a culture of assessment entailed was explored.

Cultures of Assessment

As alluded to in the previous section by assessment scholars, administrators who created, facilitated, and sustained certain elements were more likely to implement a philosophy rooted in assessment with the intent of further promoting student learning and thereby creating a culture of assessment (Green et al., 2008; Grunwald & Peterson, 2003; Kezar, 2012; Rosaen et al., 2013; Seagraves & Dean, 2010; Slager & Oaks, 2013). Cultures of assessment can provide institutions of higher education with the necessary adaptability to withstand both internal and external changes and the ability to acclimate when necessary (Schuh, 2013). While opinions have varied on what factors create, sustain, measure, and identify cultures of assessment in higher education, the general consensus of what a culture of assessment entails is discussed in the subsequent section. Furthermore, scholars have focused more so on cultures of assessment in academic affairs rather than student affairs, and scholars have concentrated on qualitative studies versus qualitative studies. A thorough review of academic affairs studies that pertained to cultures of assessment were reviewed followed by a similar review of research on student affairs studies.

Academic affairs and cultures of assessment. Assessment use in the field of academic affairs has long been debated. The development and maintenance of cultures of assessment in higher education and academic affairs is more recent. Since research into cultures of assessment has been relatively new, many scholars have studied cultures of assessment in academic affairs (including academic libraries) from a variety of aspects and through both qualitative and quantitative methods. The following literature review was divided into sections based on the research methods utilized.

Qualitative studies on cultures of assessment and academic affairs. Weiner (2009) identified 15 features that contribute to a culture of assessment. The following 15 identified features were deemed crucial by Weiner (2009) when establishing a culture of assessment: (1) Precise overview of educational goals, (2) systematic usage of terms pertaining to assessment, (3) assessment programs in the custody of faculty members, (4) professional development on a continual basis, (5) administrative patronage, (6) plans and goals for assessment, (7) methodical assessment, (8) student learning outcomes established for all programs and classes, (9) overall program evaluations, (10) co-curricular assessment planning, (11) evaluation of institutional effectiveness, (12) continually education about assessment, (13) incorporation of assessment into budgets and university plans, (14) acknowledgement and rewards for assessment successes, and (15) open-mindedness and thorough communication to ideas for assessment related projects. Weiner (2009) acknowledged that the practicality of a university reaching full potential on all 15 of the features would be highly unusual, but noted that the likelihood that universities had accomplished at least some of the items listed and thus could refocus their efforts on achieving the other items not yet accomplished.

Through a combination of a systematic literature review and their own previous research, Lakos and Phipps (2004) provided their interpretation of what a culture of assessment entailed. Additionally, Lakos and Phipps (2004) sought to understand how an organization instills such a culture and what problems and rewards came about as a result. Through studying academic libraries in higher education, Lakos and Phipps (2004) identified the following as key indicators of the presence of a culture of assessment: (a) clear communication and goals, (b) positive work environment, (c) commitment to assessment, and (d) continual training and professional development. Additionally, a reward and acknowledgement system would allow organizations to instill positive reinforcement among employees and encourage assessment practice. Once assessment was conducted, Lakos and Phipps (2004) recommended that assessment results be incorporated into decision-making and be included in the continual evaluation process to ensure that the assessment was viewed in the culture as being intentional and not a waste of time. In addition to data-driven decision-making, the importance of leadership and the role that administrators play in instilling a culture of assessment was stressed. In most cases, Lakos and Phipps (2004) found that organizational personnel typically had to be under the pressure of an external entity or fear the threat of potential job loss or organizational downfall, in order to conduct assessment. A culture of assessment was not possible without the support of the leadership (e.g., encouragement, resources). Once a culture of assessment was created, Lakos and Phipps (2004) determined that the newly formed culture would be committed to offering applicable and effective services to customers as well as having an instilled organization fully dedicated to the goals and mission of the institution.

Similar to Lakos and Phipps (2004), Farkas (2013) also conducted an extensive literature review on academic libraries and cultures of assessment. However, the researcher investigated utilizing Kotter’s eight-step model for change leadership and investigated how cultures of assessment were established in academic libraries. Farkas

(2013) argued that higher education institutions would not change without a plausible reason or sense of urgency from an external entity. In addition, a culture was not able to change without a guiding coalition composed of personnel from numerous facets of the organization tasked with creation and promotion of institutional buy-in and belonging. Farkas (2013) recommended the guiding coalition also be commissioned to provide a clear vision of where the institution planned to go and how assessment would be utilized to achieve those plans. Once a vision and plans were created, Farkas (2013) emphasized that effective communication of those ideals and their connection to student learning would ultimately serve as a vehicle for obtaining buy-in of the community as a whole. The end result of the buy-in would be the empowerment of the personnel to create and facilitate their own assessment. Additionally, Farkas (2013) determined that short-term wins could contribute to a culture of assessment when the administration implemented an acknowledgement and reward system. Lastly, the researcher stressed that an administration should use assessment results to make constant improvements to their organization and be open and willing to change as needed. Farkas (2013) explained that administrators must be willing to reevaluate assessment procedures and revise processes when needed to make assessment practice habitual and further the cultivation of assessment.

Al-Thani et al. (2015) conducted a case study to identify the measures taken to compose a culture of assessment developed at Qatar University, where the university went from very poor assessment reporting to a successful assessment structure. The university had recently implemented mass communications across the campus regarding training and development regarding assessment. Thus, Al-Thani et al. (2015) reviewed two years of complete academic assessment data pertaining to student learning outcomes in order to measure whether the university's new implementations had an impact on the assessment conducted. Data collected included the initial reports conducted from faculty, as well as the reviews of both internal and external examiners. In addition, any recommendations for changes and improvements were reviewed as well from one academic year to the next to observe the differences between the two years of student learning outcome data collected. Al-Thani et al. (2015) found that institutional changes allowed for improved data, an overall better assessment process, and the successful implementation of a culture of assessment. Widespread communication, strong support from leadership, and expanded development opportunities were identified as the institutional changes that contributed to the implementation of a culture of assessment.

Schroeder and Mashek (2007) qualitatively detailed their efforts to create a culture of assessment in the Wartburg College Library. The movement toward a culture of assessment came after the college administration began questioning the contributions of the library on campus. With the arrival of a new director and building, the department opted to create a new program, Information Literacy Across America (ILAC). The ILAC program was initiated to furnish students with the necessary research tools a library can provide to better aid their academic journey. However, the organization utilized a culture of assessment to ensure that the effects or efforts of the program could be measured and that the library could obtain the buy-in of administrators and faculty.

A culture of assessment allowed library staff to deliver student learning, while documenting their efforts, allowing them to constantly change and evolve, and make informed decisions based on evidence gathered. The library staff were able to do so by incorporating the program into required general education classes already embedded in the curriculum, creating a clear mission statement, and through the support of the library director who also had the capabilities to redirect resources to the program as needed (e.g., hiring new staff, training). Data were continually collected in various ways, times, and from different viewpoints; thereby, utilizing all collected data to make informed changes to operations, programs, and staff. Schroeder and Mashek (2007) concluded that the implementation of a culture of assessment utilizing the ILAC program was successful due to their increased involvement in the university curriculum and feedback indicating the occurrence of student learning as a result of their intervention.

In a unique approach, Piascik and Bird (2008) conducted a case study on the University of Kentucky College of Pharmacy (UKCOP) and their implementation of a culture of assessment. Initially, the UKCOP began developing a culture of assessment when their doctoral degree was approved to be offered. The administration highly supported the initiative and gave numerous resources for the development of a culture of assessment. In turn, the UKCOP began to work with the Office of Education to research all assessment conducted during that time. Additionally, the Department of Education collaborated with the UKCOP to help create and facilitate new assessment measures and tools.

Piascik and Bird (2008) attributed faculty development, task forces, and educating students as ways in which a culture of assessment was instilled at UKCOP. Faculty development was crucial since the faculty needed to be informed of how they could develop, attain, and then incorporate assessment into their courses. Implementing a task force was essential because the group worked with the Office of Education to obtain all assessment previously conducted within the UKCOP. This gave the UKCOP an opportunity to reduce duplicated efforts and begin incorporating findings from the assessments that were not utilized previously. Additionally, the UKCOP educated students on the importance of how their feedback contributed to the overall improvement of the college. Piascik and Bird (2008) cited the use of continuous improvement, numerous types of assessment, and a clear vision and curriculum as methods for further improving the culture of assessment. Some of the challenges faced were lack of trained faculty in assessment and the continuous changes associated with higher education in terms of technology, statutes, and teaching methods.

Kalu and Dyjur (2018) documented a similar culture of assessment intervention to that of Piascik and Bird (2008) by implementing a qualitative case study on the University of Calgary. The university implemented a mandatory curriculum review process in an effort to better communicate and align learning outcomes associated with the respective disciplines. According to Kalu and Dyjur (2018), the new process allowed: (a) faculty to have intentional conversations, (b) improve student learning, (c) appoint a primary person to maintain movement; (d) develop a plan, (e) review the mission of the respective discipline, (f) gather a variety of data from multiple sources at different times, (g) explore gathered data leading to shared ownership and improvement; (h) create an action plan and disburse information, and (i) enact the action plan.

Overall, the authors thought that the implementation of the curriculum review leading to a newly formed action plan was implemented effectively at the university. Kalu and Dyjur (2018) maintained that the structure in which the implementation was made allowed meaningful conversations between faculty and administrators to occur and created accountability among all. While the authors never explicitly stated nor cited a culture of assessment in their study, there are key indications that they adapted a culture of assessment into what they thought worked for them. Given that the university incorporated many of the key features associated with cultures of assessment (e.g., student learning focused, assessment leadership, shared assessment), the inference was that a culture of assessment was perhaps implemented. However, the sustainability of that culture was questionable since the entire process was initiated to meet mandated requirements and resulted in substantial changes for faculty (e.g., revised schedules, removal of courses). Change inspired solely by mandate with little reward for personnel could compromise the sustainability of a culture of assessment or define the culture more so as a culture of compliance or fear (Skidmore et al., 2018).

Like many of the case studies discussed pertaining to faculty training, Schlitz et al. (2009) chronicled their efforts to create faculty learning community. The community focused on student learning and feedback utilizing a technological approach to rubrics at Bloomsburg University in Pennsylvania. The intent of the communities was to build trust, communication, and consensus among faculty members from various disciplines, but all wanting to change or improve their teaching styles to improve student learning.

Group participants were selected through the implementation and marketing of an on-campus competitive mini-grant. Once the multi-disciplined group was formed, they were merged into a cohort and trained on online rubrics and assessment practices. The cohort consisted of volunteers who shared trust in the group, saw the benefits and using and sharing data from their assessments, and wanted to be better professors. Upon completing training in the cohort, each of the faculty members documented how they tailored their online rubrics for their specific courses. Through the creation and facilitation of a faculty learning community, Schlitz et al. (2009) documented how they were able to create a culture of assessment within their group. While the culture was small (i.e., 7 participants and 2 facilitators), the authors attributed common goals, clear understanding of vision and goals, and the autonomy to try and fail without repercussion, as to how they were able to form a culture of assessment.

Similar to Schroeder and Mashek (2007), Verzinski et al. (2019) documented the efforts of Bowie State University in Maryland to convert to a culture of assessment after a visit from their accrediting commission. The university initiated the process of developing a culture of assessment by implementing four new elements: two new committees, implementation of an assistant vice president for assessment, formation of a new Center for Academic Programs and Assessment, and coordinators for assessment and accrediting purposes. The intent of the elements was to establish continual support from the administration and to create a collaborative environment for faculty further building trust and reducing fear of assessment. The new resources also allowed for the review of the institutional strategic plan to ensure congruence and the ability to implement assessment training. Additionally, the support of the faculty senate further expanded the support and culture of assessment at the university. Verzinski et al. (2019) explained that all funding for the implementation came from Title III funding, which not all institutions are qualified to receive. Additionally, Bowie State University had an enrollment of around 5,000 students, which may have contributed to the implementation of a culture of assessment.

Hong (2018) documented the implementation of a Faculty Assessment Fellows (FAF) program, which was created to help the institution transition to culture of assessment and to meet accreditation pressures at Biola State University. The institution was a private university in California with less than 5,000 students enrolled. The university was described as having passed accreditation, but received a recommendation to increase university faculty involvement in campus assessment efforts. As a result, the university created the 2-year cohort in FAF, with the purpose of educating faculty members to shift from instruction-based teaching to learning-based teaching. Members of FAF were also to become well versed in assessment, and eventually serve as an assessment resource and mentor to other faculty on campus. The FAF also allowed faculty the autonomy to explore assessment without fear and to confide in others in the program and provide a compensation for their involvement in the program. Hong (2018) explained that the FAF program was valued so much by the university that the program was renewed for a third cohort, despite being recently accredited and making campus-wide budget cuts. However, Hong (2018) provided little to no information on how the faculty who completed the program benefitted or whether faculty outside of the program benefited by utilizing faculty who completed the program as local resources.

Duff (2010) also discussed how pressure from accreditation firms propelled George Washington University’s Columbian College of Arts and Sciences to progress to the culture of assessment. Once the college was told by their accreditation board to work on their assessment efforts, the college rapidly created an ad hoc committee to help plan strategies and the implementation process. The committee created an assessment template for the departments to use in an effort to aid departments in identifying all of the necessary components associated with an assessment plan. In addition, all faculty were required to add their learning outcomes to their syllabi.

Duff (2010) also noted that the college participated in numerous educational efforts. Those efforts included the dean of the college bringing outside assessment experts to train faculty so that their competencies were up to par, and the faculty attending workshops created by the regional accreditation firm called the Engaging Departments Institute. Four departmental chairs attended the institute. While there, the chairs discussed departmental assessment plans beginning with the broad goals of general education and then were allowed to narrow the scope of their goals to their specific department's needs. The faculty were also allowed to speak candidly about their assessment concerns and voice any concerns about how negative assessment results might affect their department (e.g., budget, resources). Duff (2010) attributed the quick decisions made by college administrators and the Engaging Departments Institute as the driving forces for how the college was able to begin swiftly developing a culture of assessment.

From a smaller unit perspective, Hill (2005) researched and discussed how a culture of assessment was implemented and the shortcomings associated with implementation within his own academic department. The Department of Political Science at Northeastern Illinois University was the focus of the study. Hill (2005) identified issues that faculty often had with assessment in general: (a) lack of trust and the apprehension of how assessment will be used, (b) making assessment practical and attainable, (c) expectation of commitment, and (d) the presence of individuals who are able to fix assessment problems or issues should any arise.

Initially, the department only conducted assessment for the students majoring in political science and disbursed a satisfaction survey and then an exit survey, with the exit survey resulting in failure. Eventually, the department decided to begin assessment for their introductory classes to better gage their students. Hill (2005) noted that administrators were careful not to apprehend the faculty for the failure of the exit survey and communicated to faculty that they had nothing to fear from the results of assessment conducted. In addition, trainings were facilitated for identified individuals who were more familiar with assessment so that they could assist with peer mentorship within the department. In turn, those identified individuals were able to assist their peers who were not sure how to proceed with their facilitation.

The last part of the implementation included faculty creating a strategic plan with goals and objective for the department. Hill (2005) noted that the changes eventually experienced setbacks in implementing a culture of assessment when two senior departmental faculty, who were peer mentors, retired. The retirement of the peer mentors led to decreased accountability, distrust, and burnout among the remaining faculty.

Like Farkas (2013), Lane et al. (2014) conducted a case study on a school of business and their effort to convert to a culture of assessment using the change management approach, using Kotter's eight step process. In the case study, Lane et al. (2014) explained that urgency was established through tying funding to assessment completion and an assessment committee was developed as a guiding coalition that developed a vision and strategy. From there, the coalition communicated their vision and strategy by requiring faculty to add the information to their syllabi, make necessary adjustments to grade scales, and communication about assessment in general. In an effort to involve all faculty, the coalition assigned a task force to every faculty member in the school of business and in the meantime, the faculty celebrated small assessment milestones with a simple potluck.

As the assessment continued, the school of business was required to produce more assessment for accreditation since the school lacked prior proper documentation and manage all of the information electronically. The school of business instituted new changes including changes to courses, prerequisites, and exam requirements instituted new approaches. Lane et al. (2014) determined that each step of Kotter's eight-step process of change management was successful in the school of business, but they acknowledged that the driving force behind the success was most likely the threat of not being reaccredited by their regional accreditation agency. The scholars emphasized the need for communication and acknowledged the need for more celebrations. While the Lane et al. (2014) claimed the case study was a success, the sustainability of the culture of assessment is questionable given the motives for developing a culture of assessment and mandated participation.

With a unique approach that detours from the many case studies reviewed, Holzweiss et al. (2016) used the *Survey of Assessment Culture* to conduct a classic content analysis on two of the questions asked in the survey. The intention was to explore how administrators viewed assessment, why assessment was conducted, and their perspective on the culture of assessment at their institution. The survey consisted of 302 responses to the two questions reviewed out of the 424 survey respondents. The analyzes of the two questions allowed for the exploration of what a culture of assessment consisted of and how to establish a culture of assessment in an institution of higher education.

Holzweiss et al. (2016) determined that administrators identified compliance and student learning as the main reasons for conducting assessment. In addition, the scholars also found that administrators described a culture of assessment as more of a procedural aspect than a cultural aspect. Moreover, administrators were more likely to discuss how and why they conducted assessment as opposed to the campus cultural dynamics that played a role in how and why they conducted assessment.

Holzweiss et al. (2016) recommended the following: (a) reviewing assumptions pertaining to assessment on campus, (b) developing a common language when discussing or referring to assessment, (c) utilizing assessment data to improve the assessment process, (d) having open discussions with the various divisions on campus, and (e) encouraging new methods and ideas concerning assessment. Among the recommendations made by Holzweiss et al. (2016) was the recommendation that future studies investigate different subcultures with an institution (e.g., academic affairs, student affairs), as well as consideration into institutional size and the potential impact size has on creating a culture of assessment.

Also providing a unique approach to culture of assessment research, Fuller et al. (2015) conducted a Delphi study to determine what leaders in assessment thought they did to cultivate and sustain cultures of assessment. To do so, nominations were requested from the 1,500-member listserv on the Assessment in Higher Education. The request provided 10 viable participants that consented to participate in a multi-round Delphi study. Initially, all participants were sent an open-ended survey consisting of 4-questions. Once the responses were received, the responses were synthesized into themed statements to be sent back to the participants for ranking. The researchers repeated this process in subsequent rounds to refine their results with the goal of developing a consensus among participants.

After conducting the study, Fuller et al. (2015) found that the panel of respondents identified the need for a strong commitment from administrators. Also, respondents found that adapting assessment language to the specific area they were working with allowed them to put everything into perspective or context, which made understanding how assessment applied to their area easier. Additionally, respondents listed widespread communication and the reinforcement of student learning as a result of assessment as priorities. In terms of identifying a negative culture of assessment, Fuller et al. (2015) found that cultures centered on compliance or fear were identified as most prominent. Cultures of compliance or fear often view assessment as a mandated means for satisfying governmental agencies or accreditation requirements, with little to no administrative support. The survey respondents were also asked to discuss the theoretical frameworks they invoked to create a culture of assessment, but the respondents were more likely to give metaphors on their experience versus formal theories. Fuller et al. (2015) indicated that these results suggest more research into the theoretical framework of a culture of assessment. Finally, the survey asked respondents to provide guidance to others who practice assessment. The consensus from the respondents was the importance of communication, accountability, trust, and transparency when discussing assessment.

While numerous studies have been conducted on the topic of academic affairs and culture of assessment, there appears to be a heavy usage of case studies in order to investigate institutions. Case studies can be useful for institutions that may be similar to that of the institution being studied, but overall the results of case studies cannot be generalized. Moreover, case studies do not allow institutions to compare themselves to other similar institutions, which might prove useful to practice.

Quantitative studies on academic affairs and cultures of assessment. A few quantitative studies have been conducted to study cultures of assessment in academic affairs in an effort to generalize findings and find common themes among various institutions or individuals. The scholars in this section have utilized a variety of quantitative methods to explore the topic at hand. A potentially challenging aspect about quantitative studies on cultures of assessment was that instruments to measure cultures of assessment were fairly new.

Baas et al. (2016) investigated the various feelings and viewpoints of faculty and administrators regarding cultures of assessment in an effort to further explore whether these viewpoints hinder the progress of a culture of assessment. In an effort to measure the differing opinions in higher education, Baas et al. (2016) utilized Q methodology to conduct methodical study on the viewpoints of academics regarding assessment. A concourse of 50-items was developed with various statements regarding assessment with a variety of viewpoints taken from multiple sources including comments from *The Chronicle of Higher Education*, the National Institute for Learning Outcomes, and many others. The compiled statements were then sent to people selected to be very vocal about assessment. Upon receiving the statements, participants were required to order the statements in accordance to their beliefs from most characteristic to least characteristic, with the middle of the scale being neutral.

Baas et al. (2016) received 40 responses from a group of diverse participants and conducted their quantitative method. Utilizing a two-factor analysis, the 32 of the 40 respondents who showed significance were categorized into two groups: Group A and Group B. Group A was composed of 17 faculty members, two who were female, and all taught in either humanities or social science. Group A considered assessment to be a burden that made no positive impact on higher education, did not accurately measure learning, and was only implemented to satisfy outside entities. Group B was composed of 15 faculty and administrators with equal balance of males and females, and from a variety of disciplines. Group B considered assessment to be an advantageous tool for faculty to utilize to promote student learning and to reflect and improve their teaching styles. Baas et al. (2016) suggested substantial motivation to shift the perspectives of either side (i.e., Group A and Group B); otherwise, the two viewpoints would remain at odds furthering the status quo.

Comparable to Baas et al. (2016), Ndoye and Parker (2010) performed a mixed methods study on cultures of assessment in higher education institutions and how those institutions developed and maintained and progressed their cultures of assessment. The study was conducted using a survey containing 15 questions, with three questions being open-ended. The survey used was largely based on the assessment culture matrix created by Higher Learning Commission. Ndoye and Parker (2010) also based the survey on their identified five factors associated with a culture of assessment: “leadership, faculty, resources, students, and access to and use of systematic data” (p. 29). The survey was distributed electronically to 2,142 members from two national databases of people who identified as conducting assessment on their campus. The survey yielded a 5.5% response rate, with the majority of respondents being from 4-year, public institutions. Additionally, almost 20% of the respondents worked in student affairs. Collected data were analyzed using descriptive statistics and qualitative coding was performed on the open-ended questions to identify themes.

As a result, Ndoye and Parker (2010) found that institutions simulated a culture of assessment with the help of leadership and support. However, the top challenges identified were getting faculty involved, assigning resources, and incorporating assessment into practice. Additionally, results indicated that the continual cultivation of a culture of assessment was enabled by assimilating assessment into the usual daily duties of employees, while also giving administrative support, communicating, and putting the results found into practice. Ndoye and Parker (2010) identified communication, enablement, and the opportunity for practitioners to experiment with assessment practices without fear, as methods for how to sustain a culture of assessment.

While the findings of Ndoye and Parker (2010) were similar to other research findings on cultures of assessment, the findings from this study could not be generalized due to the low response rate received. Additionally, there was the potential that some of the participants invited to complete the survey might have been on both distribution lists further and received duplicate invitations to participate. This study was one of the few reviewed that utilize quantitative methods, but the survey utilized lacked inclusiveness of higher education employees and organization. The survey instrument only allowed participants to select their position as faculty, administrator, or other (write in), which may have deterred participants from completing the survey out of confusion that the survey was not intended for them.

Unlike the previous research discussed, Fuller (2013) conducted an exclusive quantitative study to explore what factors create, sustain, and continually supplement a culture of assessment in higher education. Fuller (2013) did so by electronically distributing the *Survey of Assessment Culture* to a stratified, representative sample gathered from the Carnegie Classification of Institutions in Higher Education. Once institutions were identified, Fuller (2013) conducted further investigation into identifying contact information on individuals at each institution who oversaw assessment on the campus (i.e., directors of institutional research and assessment). After individuals were identified, the survey was disbursed to 1,026 participants with 109 of the emails not valid. Of the 917 participants, Fuller (2013) received 316 responses for a total response rate of 34.5%. The results obtained from the respondents indicated that there was a shift in leadership roles pertaining to assessment. Approximately 50% of the respondents described their assessment efforts as coming from a variety of individuals at an institution. The results also indicated that approximately two-thirds of the respondents did not identify as directors of institutional research and assessment, denoting a potential shift in leadership or organizational structure in higher education. In addition, approximately half of the respondents selected that student learning was the main reason assessment was conducted on their campus, while the other half of the respondents selected accreditation (40.6%), accountability (8.4%), Compliance (1.2%), and tradition (.8%). When asked to rank key individuals and departments based on their support or resistance of assessment, the top ranking four who were supportive of assessment were president (91.6%), provost (90.6%), student affairs (88.5%), and faculty (75.8%). These findings by Fuller (2013) gave insight into how cultures of assessment are established and sustained despite that the results could only be cautiously generalized due to the response rate received.

Building upon the instrument and data previously investigated by Fuller (2013), Fuller and Skidmore (2014) tested the validity and reliability of the *Survey of Assessment Culture,* in an effort to tune an instrument capable of measuring cultures of assessment. The researchers did this in response to an underwhelming availability of tools that allow researchers to conduct studies on cultures of assessment. To conduct this study, the scholars distributed an electronic survey using a stratified, random sample of 917 administrators. The survey was sent specifically to administrators whose positions pertained to overseeing assessment and institutional research. Fuller and Skidmore (2014) attained a 25.7% response rate from the initial sample. With data attained, the scholars then conducted an exploratory factor analysis on a 3-factor model and then conducted a reliability analysis. Despite minor deviations in the instrument tested and the theoretical framework used, the three factors considered in the instrument were verified. The three factors were "*Clear Commitment, Connection to Change, and Vital to Institution".* While the scholars acknowledged issues concerning sample size and generalization of the findings, data collected were essential to testing and refining the instrument, thereby having the potential to help future researchers conduct their own studies on the culture of assessment in higher education.

Correspondingly, Fuller et al. (2016) sought to generate a tool that would have the capability to recognize when a culture of assessment, as theoretically described by numerous scholars, existed in an institution of higher education. In doing so, they conducted a thorough literature review of what previous scholars identified as contributing to assessment culture and identified common themes of what a theoretical culture of assessment entailed. The five themes identified were "(a) belief system, (b) messages, (c) observed behaviors, (d) observed structures, and (e) student or other outcomes" (Fuller et al., 2016, p. 414). Once common themes were established, the Fuller et al. (2016) compiled a list of potential questions to include in the survey and refined the questions based on feedback from other established researchers in the field. Once the survey was completed, the *Administrators' Survey of Assessment Culture* was distributed to a stratified, random sample of administrators across numerous higher education institutions during the fall of 2013. Of the total surveys distributed, two-thirds of the total sample size, or 370 participants, completed the survey.

After Fuller et al. (2016) conducted their analysis of attained data, they were able to validate five factors that contribute to a culture of assessment: "faculty perceptions, sharing, use of data, sharing, compliance or fear motivators, and normative purpose of assessment" (Fuller et al., 2016, p. 423). Thereby, the researchers determined that the newly created tool was a start for how institutions could assess their own cultures of assessment. Fuller et al. (2016) recommended the tool be used to further explore other factors that may contribute to the culture of assessment such as comparing institutions based on kind of institution or their geographic region.

Skidmore et al. (2018) investigated cultures of assessment through a person-centered approach using empirical methods to determine whether group patterns existed among faculty members. Cultures of assessment were divided into three groups: *Culture of Fear*, *Culture of Compliance*, and *Culture of Student Learning*. Skidmore et al. (2018) utilized data from the *Faculty Survey of Assessment Culture* to conduct the study. The survey was disbursed to 3,292 institutions and included the following distinctions: 2-year and 4-year institutions; primary college unit. Once the survey was electronically distributed, a 36% response rate was received, and a latent profile analysis followed. The analysis yielded four culture of assessment groups instead of the initially discussed three, with the fourth culture being identified by Skidmore et al. (2018) as *Evolving Student Learning Culture*. Among all faculty respondents, 43.7% aligned with a *Culture of Student Learning*. Almost half of the faculty respondents who aligned with a *Culture of Student Learning* were from 2-year institutions (50.2%) while only 39% of the respondents were from 4-year institutions. Pertaining to primary college unit, a *Culture of Student Learning* was the highest ranking with the exception of the College of Liberal Arts and the College of Education. The College of Education had the highest percentage for a *Culture of Fear* (14.3%) followed by the College of Science/ Applied Science (11.3%). Skidmore et al. (2018) recommended further exploration into how institutional size or other institution-specific factors impact the various cultures of assessment identified.

Literature reviewed on quantitative studies on cultures of assessment pertaining to academic affairs were relatively newer and consisted of researchers testing frameworks much needed for studying cultures of assessment. However, most notably there was but only a fraction of the quantitative studies that were conducted on cultures of assessment when compared to that of the qualitative studies. Thus, further indicating the presence of a literature gap and the need for researchers to explore and conduct more quantitative assessment on cultures of assessment.

Student affairs and cultures of assessment. As the historical relationship between assessment and divisions of student affairs indicated, assessment efforts in divisions of student affairs can still be improved upon. That being said, there was a serious gap in the literature reviewed on assessment culture in student affairs as well. In response to the lack of literature on student affairs assessment culture, some scholars conducted research to investigate the assessment efforts of divisions of student affairs to further provide insight.

Qualitative studies on student affairs and cultures of assessment. Schuh (2013) used his previous research experience on the topic of student affairs assessment and an exhaustive review of the literature to discuss the components of a culture of assessment. The scholar identified commitment to assessment, and unremitting development and revision as a component of a successful culture of assessment in student affairs. Schuh (2013) also identified "positive relentlessness" and continued adaptability as another factor for creating a culture of assessment (p. 92). Similarly, Schuh (2013) recommended that administrators take the necessary measures to assure their student affairs staff that assessment results would only be used as a tool for improvement and that the fear of being reprimanded was not necessary. In doing so, administrators begin the promotion of inquiry with assessment. Along with a commitment from administrators to use assessment results for continuous improvement, Schuh (2013) also recommended that decision-makers make decisions based on the results of data collected. Additionally, Schuh (2013) pinpointed that institutions should create assessment pertaining to firm learning outcomes that should be congruent with institutional goals, measurable, and widely communicated with all. The researcher also stressed that assessment cannot only be the responsibility of the assessment personnel, but should be undertaken by the entire division if a culture of assessment is to be established.

Moreover, Schuh (2013) acknowledged the worthiness of quantitative assessment but encouraged the use of more qualitative assessment (e.g., focus groups) in an effort to collect rich data from smaller groups of students. The use of qualitative assessment can allow researchers to collect abundant data on a limited number of students so that the results can be used to measure deeper insight on the small group of students. Whereas, if a researcher utilized quantitative assessment, the study would not be generalized beyond the small local sample size and would not contain the enhanced data collected from that of a qualitative assessment. Schuh (2013) concluded that cultures of assessment tended to be more successful when an institution thoroughly communicated results, acknowledged and rewarded assessment efforts and results, and acted upon the findings of conducted assessment.

Shefman (2014) conducted a case study on a large, public higher education institution to document how well the student affairs division at the institution transitioned to a culture of assessment. Specifically, Shefman (2014) documented how the perceptions of the staff changed during the transition period, which ultimately contributed to the establishment of a culture of assessment at the institution. The higher education institution assessed was an urban university with approximately 40,000 students. The student affairs division consisted of 15 areas with a quarter of a thousand employees who worked in the division. Shefman (2014) conducted interviews with the staff members who worked in the student affairs division, with the interviews consisting of 18 open-ended questions. After data analysis, Shefman (2014) found that most of the people interviewed did not fear assessment nine-months into the transition. In addition, student affairs staff thought that assessment helped them contribute to the campus as a whole, introduced accountability to departments within the division, and was a good tool to use as a professional in higher education. Shefman (2014) argued that converting to a culture of assessment in student affairs should consist of communication and transparency across the board and throughout the division, with buy-in and action required from everyone including the administration.

On the other hand, Seagraves and Dean (2010) conducted research on cultures of assessment in student affairs, but at smaller institutions. The scholars conducted a qualitative study to explore the perceptions of student affairs personnel in smaller universities and how external influences like accreditation impacted assessment practices. Smaller universities and colleges were selected as the subject of this investigation due to their unique structure and their likelihood to not have a plethora of resources for their assessment needs unlike their larger counterparts. The three institutions selected were identified as being actively engaged in assessment, recently accredited through the Southern Association of Colleges and Schools and had an enrollment of 5,000 or less. Using qualitative methods, Seagraves and Dean (2010) gathered data via interviews and informal focus groups with staff. Separately, interviews were conducted with senior student affairs officers at each institution. After data analysis, Seagraves and Dean (2010) noted that three institutions had developed a culture of assessment in their student affairs divisions. Also, both the staff and their respective administrators were well informed, engaged, and involved in the assessment efforts of their respective departments, their division, and the strategic goals of their university. In addition, Seagraves and Dean (2010) identified that each of the institutions used assessment as vehicle for improvement in a collegial atmosphere. Regarding accreditation, not only did the involvement of external influences display the assessment successes of each institution, but also helped student affairs staff to refine their practice methods. The summation of the findings of Seagraves and Dean (2010) alluded to the size of the institution as being an ideal environment for divisions to develop cultures of assessment due to less specialized staff, a small physical campus, and the ability to have "minimal competition for resources and for students' attention" (Seagraves & Dean, 2010, p. 319). The researcher recommended the development of quantitative instruments and measures so that future findings on assessment in student affairs had the potential to be generalized.

While more qualitative studies may have been conducted on the topic at hand, the studies aforementioned were the only studies found by the author. Both researchers gave different approaches to looking at building cultures of assessment within student affairs, but both studies had similar findings and outcomes. Additionally, both studies stressed the importance of the congruence between the goals of divisions of student affairs and the goals of the institution in general.

Quantitative studies on student affairs and cultures of assessment. Fuller and Lane (2017) investigated how to empirically measure cultures of assessment in divisions of student affairs. Fuller and Lane (2017) did so by testing whether the *Student Affairs Survey of Assessment Culture* appropriately identified the presence of assessment cultures. The survey was a derivative of the previously created and modified *Administrators survey* and was submitted to a dozen individuals who had expertise in the field of student affairs for review and calibration. Upon making the recommended adjustments to the instrument, Fuller and Lane (2017) began the distribution process. The Higher Education Directory was utilized to email 4,129 chief student affairs officers

(CSAO) to request their assistance in the study by submitting the emails of employees in their divisions who were classified as mid-manager or higher. Once emails were submitted, Fuller and Lane (2017) disbursed the survey to 2,234 nationwide participants and received 771 responses (47.5% response rate). The data collected were then processed using an exploratory factor analysis, which modified their anticipated nine-factor model derived from the *Faculty Survey* and the *Administrators Survey*, to a four-factor model instead.

That being said, Fuller and Lane (2017) found some significant similarities in what factors are associated with cultures of assessment in student affairs, such as "offering clear comments on assessment's purposes, providing regular 'success stories' as exemplars, or sharing assessment results with staff in a public manner" (p. 24). Fuller and Lane (2017) also noted that student affairs respondents indicated that they were fearful of assessment, which is similar to the results of the *Faculty Survey* (Skidmore et al., 2018). While the researchers indicated that further refinements could be made to the instrument, Fuller and Lane (2017) affirmed that the instrument would still produce accurate results in the meantime.

Unlike studies on cultures of assessment in academic affairs, there was a serious literature gap on the student affairs side. While both qualitative and quantitative studies were lacking on the subject at hand, quantitative research into student affairs and cultures of assessment appear to be even more scarce. As mentioned before, cultures of assessment can help organizations hold themselves accountability and justify their existence, which is often what internal and external stakeholders demand. Acclimating to a culture of assessment would essentially provide divisions of student affairs with the necessary data to further justify their place on university campuses and their existence in higher education.

Variance Associated with Institutional Size and Geographic Region

The intention of this study was to inquire into what differences (if any) in cultures of assessment in student affairs were observed when observed by institutional size and/or geographic region. As previously noted, the literature on cultures of assessment in student affairs was sparse. The scarcity of literature on the topic further prompted the need for more research on factors not previously considered to generate a better understanding of the subject matter.

Institutional size. The size of an institution has long been investigated by a variety of researchers across many disciplines. The size of an institution may influence the organizational structure, which may also have the potential to influence the general culture of organization (Oblander, 2006). As such, scholars who have researched cultures of assessment have called for future research on what differences institutional size has on cultures of assessment (Elkins, 2015; Fuller et al., 2016; Holzweiss et al., 2016; Skidmore et al., 2018).

The size of an institution may have several implications. In general, smaller institutions have smaller enrollment, which thereby have less funding and resources (Oblander, 2006). In addition, smaller institutions are more likely to have less employees and office space (Oblander, 2006; Seagraves & Dean, 2010), but less employees may not necessarily equate to fewer resources for students. That being said, unlike larger universities where the staff roles can be very specialized, staff at smaller universities tend to wear multiple hats (Oblander, 2006; Seagraves & Dean, 2010). Smaller staff size has the potential to make conversions of culture easier or harder since there are less people to convert to a new culture, but one or two resistant staff members have the power to hinder the entire process (Oblander, 2006; Seagraves & Dean, 2010). At larger institutions, staff have the potential to develop larger subcultures, which can either benefit or deter cultural shifts.

Leadership is also consideration when discussing institutional size. Staff at small institutions have a smaller organizational chart and thereby tend to be closer to administrators and other decision-makers, which may influence fear or trust in the culture. Staff at larger institutions may not have regular opportunities to meet with their administrators when compared to their counterparts at smaller institutions (Oblander, 2006).

Additionally, smaller institutions require shared resources and the collaboration of efforts, which increases the possibility of faculty and staff engagement. Whereas at larger institutions, faculty and staff may not ever interact together due to individual funding sources and the physical locations of faculty and staff at larger universities. As such, relations between the faculty and staff may influence how and where assessment is conducted since faculty have long been involved in assessment. With consideration to all of the observations discussed, further exploration is needed to observe whether differences assessment cultures in student affairs vary by institutional size.

Geographic region. Geographic region is another independent variable in this study. Like institutional size, many researchers have conducted studies on the impact institutional size may have on various components of higher education. However, there are little to no studies that have been conducted inquiring about cultures of assessment in student affairs and the potential differences as a function of the geographic region of the institutions. In the literature reviewed, only Fuller et al. (2016) recommended future inquiry into cultures of assessment and geographic region. However, geographic region has the potential to influence institutions of higher education and thus their cultures.

Lane and Brown (2004) discussed the historical context of institutions and their geographic locations. The scholars deferred to colonial times when universities were called community institutions (Lane & Brown, 2004). The implication of a community institution is that the surrounding community had a large impact on the institution.

Today, the same implications can be made. Based on where an institution is located, the institution would have to abide by certain local and state mandates, local and state politicians, and any associated governing boards. Not to mention that many public institutions receive state and local funds that may vary based on the state the institution is located. The regional divides utilized for this study were displayed in Table 1, which described which states were assigned to which of the regional accreditation boards.

Specifically, institutions receive accreditation from their designated regional accrediting board. In addition, some institutions may divert their resources to securing their campus from known regional impacts such as hurricanes, tornadoes, earthquakes, snowstorms, and flooding. For all of these reasons, an inquiry into what differences could be observed in student affairs assessment culture based on geographic region was made.

Conclusion

A discussion of the literature reviewed for this study was compiled to inform about cultures of assessment in student affairs. As discussed, the concept of assessment culture is relatively new and thus, literature was limited. Literature on cultures of assessment pertaining to divisions of student affairs was even more limited. Assessment in the realm of student affairs is a newer initiative to those in the field as opposed to others like faculty, who have been enthralled with assessment for quite some time. An overview of how research on assessment culture and other related topics associated with this study was discovered and discussed was provided in the search description. In conducting research on this topic, the search led to some research studies conducted over 10 years ago. More distinguishably, the gap in literature regarding the topic at hand required more contextual research in an effort to demonstrate the veracity of the need and yet lack of studies on student affairs and cultures of assessment.

Thus, research on the historical aspects of assessment in student affairs was reviewed in an effort to provide relative information about the nature of assessment in the student affairs profession. Researchers in the literature reviewed indicated that student affairs assessment efforts were delayed when compared to other areas of higher education and in dire need to document their efforts toward student learning (Henning, 2016; Schuh & Gansemer-Topf, 2010; Seagraves & Dean, 2010). A historical review of assessment in student affairs led to the review of literature on assessment in higher education and the need for better practices. Most notably, assessment scholars who studied student affairs assessment articulated the need for more research into how divisions of student affairs could improve assessment practices (Banta & Kuh, 1998; Elkins, 2015; Green et al., 2008; Peterson & Augustine, 2000; Seagraves & Dean, 2010).

Similarly, a review of literature regarding organizational culture in higher education was also provided to ensure that the circumstances of changing a culture in higher education were thoroughly conferred. As mentioned, scholars stressed the importance of higher education decision-makers knowing their own institutional culture (Cameron, 1984; Fjortoft & Smart, 1994; Hatch, 1993; Schein, 2017; Smart et al., 1997; Sporn, 1996; Tierney, 1988). Essentially, the knowledge of one's own institutional culture can allow a better understanding of how to adjust and adapt the structure as needed in situations of adversity.

Once contextual information was reviewed, research on cultures of assessment were evaluated. Recognizably, the presence of qualitative literature case studies was substantial (Al-Thani et al., 2015; Duff, 2010; Hill, 2005; Hong, 2018; Kalu & Dyjur, 2018; Lane et al., 2014; Piascik & Bird, 2008; Schlitz et al., 2009; Schroeder & Mashek, 2007; Shefman, 2014; Verzinski et al., 2019) while the presence of quantitative literature was faint (Fuller, 2013; Fuller & Lane, 2017; Fuller & Skidmore, 2014; Fuller et al., 2016; Ndoye & Parker, 2010; Skidmore et al., 2018). Conversely, divisions of student affairs were typically not studied when discussing cultures of assessment with the exception of a few (Fuller & Lane, 2017; Schuh, 2013; Shefman, 2014). As such, the literature reviewed indicated a need for quantitative studies on cultures of assessment in student affairs.

CHAPTER III

Methodology

Chapter III included the research methodology for this quantitative study that explored whether differences were present in cultures of assessment in divisions of student affairs when compared by institutional size and geographic region. The utilization of quantitative methods for this study allowed for the use of a nationwide sample size and provided a greater overview to observe any differences that were present. Furthermore, there was a lack of research employing quantitative methods to examine cultures of assessment in general. The disparity of studies using quantitative methods when studying student affairs and cultures of assessment was even more disconcertingly scarce. Thus, a quantitative study was selected to help bridge the gap in the literature. The remainder of Chapter III described the research methods of this study as follows: (a) research questions; (b) null hypothesis; (c) alternative hypothesis; (d) research design; (e) selection of participants; (f) instrumentation; (g) ethics and data security; (h) data preparation; (i) data analysis plan; (j) statistical assumptions; and (k) summary.

Research Questions

An inquiry was made into whether differences were present in cultures of assessment in divisions of student affairs across the nation when observed by comparable factors (i.e., institutional size and geographic region). The research questions for this study were formulated via an explorative approach so that any findings associated with this study might inform other researchers and future research. As stated in Chapter I, this study consisted of the following three research questions: (a) What differences, if any, in assessment culture were present as a function of institutional size?; (b) What differences, if any, in assessment culture were present as a function of geographic region?; and (c) What differences, if any, in assessment culture were present as a function of institutional size and geographic region?

Null Hypothesis

Creswell (2009) explained that the purpose of the null hypothesis is to acknowledge the possibility that the variables being studied have no significant relationship in the general population. Thus, accepting a null hypothesis in this study would imply that the observed independent variable produced no statistically significant differences in cultures of assessment in divisions of student affairs. Conversely, rejecting the null hypothesis would indicate the presence of statistically significant differences. The following were the null hypotheses for this study: (a) No statistically significant differences in assessment culture were present as a function of institutional size; (b) No statistically significant differences in assessment culture were present as a function of geographic region; and (c) No statistically significant differences in assessment culture were present as a function of institutional size and geographic region.

Alternative Hypothesis

In the event that the results of a study yield a null hypothesis to be rejected, researchers postulate a prediction (i.e., alternative hypothesis) as to what results will be yielded (Creswell, 2009). The first alternative hypothesis was that statistically significant differences in assessment culture were present as a function of institutional size. The second alternative hypothesis was that statistically significant differences in assessment culture were present as a function of geographic region. The third alternative hypothesis was that statistically significant differences in assessment culture were present as a function of institutional size and geographic region.

Research Design

A non-experimental quantitative research design was selected in response to the research questions posed and the nature of the data selected to analyze. The data selected for analyses in this study were considered archival data and consisted of responses collected from across the country. The utilization of archival data does not allow variables to be manipulated nor assigned to a random group, which thereby classified this study as a non-experimental research design (Johnson & Christensen, 2016). While non-experimental research designs are not as strong as experimental designs, they allow for preliminary exploration when researchers are unable to conduct an experimental design (e.g., lack of resources, ethics, practicability). Johnson (2001) argued that "non-experimental quantitative research is an important area of research for educators because there are so many important but non-manipulable independent variables needing further study in the field of education" (p. 3).

This study had three independent variables: (a) institutional size; (b) geographic region; and (c) institutional size and geographic region. Both the size and geographic region of each institution were organized into subscales. In addition, the dependent variable used in this study (i.e., assessment culture) was measured via *Assessment Culture Scales*. While researchers have speculated as to what factors are indicative of cultures of assessment (Fuller, 2013; Fuller & Lane, 2017; Fuller & Skidmore, 2014; Fuller et al., 2016), the following *Assessment Culture Scales* were used to measure assessment culture in student affairs: (a) *Focus on Student Learning;* (b) *Fear or Distrust* *of Assessment*; (c) *Benefits of Assessment*; (d) *Clarity of Assessment Leadership*; (e) *Use of Assessment Data*; and (f) *Sharing Assessment Results* (Fuller, 2013; Fuller & Lane, 2017; Fuller & Skidmore, 2014; Fuller et al., 2016). In an effort to avoid misinterpretations of the findings of this study, the research questions were carefully written to only mention differences in the variables with no implication of causality.

Selection of Participants

The selection of participants originated from the archival data utilized for this study. The data sets derived from the distribution of the 2016 *Student Affairs Survey of Assessment Culture* via Principal Investigator, Dr. Mathew B. Fuller. The target population for the 2016 *Student Affairs Survey of Assessment Culture* was any person employed in student affairs at any accredited institution, who ranked as a mid-level manager or higher (Fuller & Lane, 2017). To begin establishing a bank of viable candidates, the Principal Investigator gathered contact information for 4,129 CSAOs from the Higher Education Directory (Fuller & Lane, 2017). Upon doing so, the Principal Investigator contacted the CSAOs explaining the *Student Affairs Survey of Assessment Culture* and the benefits of the participation of their institution.

To participate, the Principal Investigator requested that the CSAOs voluntarily submit email addresses for all employees who met the criteria to participate in the study. In turn, interested CSAOs provided email addresses of potential study candidates to the Principal Investigator. Ultimately, the Principal Investigator was able to recruit 141 participating institutions and 1,624 viable candidates (Fuller & Lane, 2017). The 141 participating institutions included multiple community colleges that were associated with nine separate community college systems (Fuller & Lane, 2017). The Principal

Investigator opted to combine responses from individual community college campuses into their respective college systems since the average number of responses from those campuses was less than five (Fuller & Lane, 2017). In turn, viable candidates from a total of 59 institutions were invited to participate. All potential participants were only contacted via email so that candidates would be less likely to feel as if their privacy had been infringed upon (Fuller & Lane, 2017). In addition, survey participants were asked not to provide any form of information that would lead to self-identification.

Ultimately, the Principal Investigator obtained a 47.5% response rate (N = 771), which only included responses with at least 50% of the survey questions completed (Fuller & Lane, 2017). The Principal Investigator established a 3-level stratification matric (institutional size, region, degree type) with a secured minimum of one partaking institution (Fuller & Lane, 2017). In doing so, the Principal Investigator solidified data necessary for this study by stratifying samples that included the subgroups identified as independent variables in this study (i.e., assortment of institutional sizes and geographic regions).

Instrumentation

This study inquired as to whether differences were present in cultures of assessment as a function of institutional size and geographic region via a non-experimental research design utilizing archival data. As disclosed in the literature review in Chapter II, quantitative instruments measuring cultures of assessment have been scarce and there is a substantial lack of research on student affairs assessment culture. However, Principal Investigator, Dr. Mathew B. Fuller, developed, calibrated, and validated three instruments (i.e., *Administrators Survey of Assessment Culture; Faculty Survey of*

Assessment Culture; Student Affairs Survey of Assessment Culture) with the specific intent of quantitatively measuring cultures of assessment in various areas of higher education. Numerous studies conducted with the instruments have also been published in peer review journals (Fuller, 2013; Fuller & Lane, 2017; Fuller & Skidmore, 2014; Fuller et al., 2016; Skidmore et al., 2018). In addition, the instruments created were devised with Maki's (2010) *Principles of an Inclusive Commitment* as their theoretical framework, which was also the theoretical framework selected for this study. Thus, the archival data selected for this study resulted from the facilitation of *Student Affairs Survey of Assessment Culture*.

The *Student Affairs Survey of Assessment Culture* was derived from two previously developed instruments, the *Administrators Survey of Assessment Culture* and the *Faculty Survey of Assessment Culture* (Fuller & Lane, 2017). In 2011, the *Administrators Survey of Assessment Culture* (i.e., the original survey) was developed as a result of a thorough and extensive synthesis of literature on attitudes and perceptions concerning assessment culture (Fuller, 2013; Fuller & Lane, 2017). The survey was then sent to a randomly selected stratified sample of professionals who specialized in institutional research and assessment in higher education in an effort to obtain a nationwide representative sample of feedback (Fuller, 2013; Fuller & Lane, 2017). The results of those efforts established the foundation for the two subsequent assessment culture surveys.

In 2013, Principal Investigator, Dr. Mathew B. Fuller, created the *Student Affairs Survey of Assessment Culture*, to measure the perceptions of mid-level professionals in divisions of student affairs regarding assessment culture at their institution. Unlike the two former surveys, the *Student Affairs Survey of Assessment Culture* was tailored to discuss cultures of assessment on the divisional level rather than on the institutional level (Fuller & Lane, 2017). In addition, the wording was adjusted to construct a more applicable survey for the student affairs population (Fuller & Lane, 2017). In 2014, survey feedback was sought from a nationwide student affairs expert panel (Fuller & Lane, 2017).

Once recommended modifications were concluded and the Sam Houston State University Institutional Review Board (SHSU IRB) approved the survey (IRB Protocol 2013-08-11722), the *Student Affairs Survey of Assessment Culture* was ready for distribution. The survey contained 21-items with an estimated participant completion time of 20-30 minutes. Of the 21-items, there were five multiple choice and nine open-ended. The remaining seven questions were arranged into 6-point Likert-format scales, with a total of 86 statements. Each 6-point Likert-format scale requested participants to select from 6 (*strongly agree*) to 1 (*strongly disagree*).

The *Student Affairs Survey of Assessment Culture* was electronically distributed in the summer of 2016 to a nationwide sample of mid-manager or higher student affairs professionals at accredited institutions of higher education. Participants were sent reminder emails every two weeks over the course of eight weeks for a total of three reminders. All participants received an email introducing the survey and soliciting completion. The email also informed participants of the significance of their participation, potential risks, and participant anonymity. In addition, survey participants were informed that a summary report of all collected responses from their respective division would be emailed to their division's highest-ranking assessment administrator.

Once data were collected, the Principal Investigator aggregated all data onto a secure database. The secure database was hosted by the Sam Houston State University Office of Information Technology and was stored on the server for an indefinite period of time due to the intended longitudinal nature of the study. The Principal Investigator also removed any information that could potentially identify survey respondents prior to releasing summation reports to institutional student affairs assessment administrators.

When using an instrument to conduct a study, there is potential for an instrumentation threat. An instrumentation threat is the possibility of an instrument providing unreliable results (Onwuegbuzie, 2003). However, this threat was minimized through the use of expert panels. Both the original assessment culture survey and the *Student Affairs Survey of Assessment Culture* were submitted to various experts nationwide, who submitted feedback on the instrument further addressing the potential instrumentation threat. In addition, the initial use of the *Student Affairs Survey of Assessment Culture* produced data for a 4-factor model, which yielded 56% variance (Fuller & Lane, 2017).

Ethics and Data Security

Approval from the SHSU IRB was sought and approved prior to assessing any data associated with this study. To do so, Principal Investigator, Matthew B. Fuller was contacted to aid in obtaining SHSU IRB approval. As a result, SHSU IRB approval was obtained via an amendment to an already approved application (IRB Protocol 2013-08-11722).

Data accessed for this study were protected in multiple ways. All data were kept in a password protected Microsoft Excel file. In addition, the data were stored alone on an encrypted external drive. The encrypted external drive was also password protected. When data were not in use by the researcher, the encrypted external drive was placed in a locked drawer in the researcher's office, which was locked when researcher was not present.

Data Preparation

Since archival data were used, the assumption was that most of the data would have previously been coded. However, the data were still reviewed for any missing information, inconsistencies, and negative wording. In accordance with Fuller et al. (2016), any items that were negatively worded were rescaled to assure that each item's assigned value correctly corresponded with the positively worded items. Once the provided data were reviewed, data for the two independent variables (i.e., institutional size and geographic region) were coded to the data sets. For the purposes of this study, each of the institutions represented in the data set were assigned to one of the following enrollment classifications: (a) *Less than 1,000 Students*; (b) *Between 1,000-4,999 Students*; (c) *Between 5,000-19,999 Students*; and (d) *20,000 or More Students* (McFarland et al., 2019). Additionally, each institution represented in the data set was assigned to one of six geographic regions in accordance with the regional accreditation organizations presented in Table 1. The Principal Investigator indicated that data collected encompassed various institutional sizes and geographic regions (Fuller & Lane, 2017). Therefore, data were checked and recoded when necessary for the purposes of this study. After all data were properly entered and coded, the researcher began performing the statistical analyses discussed in the following section.

Data Analysis Plan

All data analyses were conducted using Windows SPSS version 25. Analyses began by first confirming that the assumptions for a multivariate analysis of variance (MANOVA) were met. Statistical assumptions were discussed in the section below.

Analyses continued by conducting descriptive statistics on data received. Descriptive statistics provide researchers with a summation of data being tested and can test assumptions. Descriptive statistical analyses provided the mean, standard deviation, range of scores, and skewness and kurtosis of data provided. In addition, descriptive statistics were analyzed to observe assumptions and to inform researchers as to whether violations of assumptions were present (i.e., independence, linearity, normality, homoscedasticity). Multicollinearity was confirmed utilizing variance inflation factors. Also, frequency was provided due to the categorical nature of the independent variables (i.e., institutional size and geographic region).

After a thorough review of descriptive statistics commenced and assumptions were met, MANOVA were performed. MANOVA is a multifaceted version of a univariate analysis of variance (ANOVA). ANOVA allows researchers to view significant differences between an independent and a dependent variable and allows the testing of categorical independent variables with two or more categories. MANOVA are similar to ANOVA, with the added capability to test more than two dependent variables and independent variable. MANOVA was selected since both independent variables in this study were categorical with more than two groups associated with each (i.e., institutional size and geographic region). In addition, the dependent variable for this study consisted of six continuous, interval variables.

The first research question was whether differences existed in assessment cultures in divisions of student affairs as a function of institutional size. The null hypothesis was that no statistically significant differences existed among assessment cultures in student affairs and institutional size. The alternative hypothesis was that statistically significant differences did exist between institutional size and assessment culture. The presence of statistically significant differences based on institutional size would allow for the rejection of the null hypothesis and acceptance the alternative hypothesis. The presence of no statistically significant differences based on institutional size would allow for the acceptance of the null hypothesis and the rejection of the alternative hypothesis.

Data analyses using MANOVA were conducted to determine whether the null hypothesis would be rejected. Institutional size was the categorical, independent variable for the first research question and was classified as follows: (a) *Less than 1,000 Students*; (b) *Between 1,000-4,999 Students*; (c) *Between 5,000-19,999 Students*; and (d) *20,000 or More Students*. The dependent variable, assessment culture, was measured using the *Assessment Culture Scales* composed of the following factors: (a) *Focus on Student Learning;* (b) *Fear or Distrust of Assessment*; (c) *Benefits of Assessment*; (d) *Clarity of Assessment Leadership*; (e) *Use of Assessment Data*; and (f) *Sharing Assessment Results*. The presence of statistically significant differences based on institutional size would allow for the rejection of the null hypothesis.

The second research question was whether differences existed in assessment cultures in divisions of student affairs as a function of geographic region. The null hypothesis was that no statistically significant differences existed among assessment cultures in student affairs based on geographic region. The alternative hypothesis was that statistically significant differences were present between the variables in the second research question.

MANOVA were conducted for the second research question as well. The independent variable was geographic region and was categorized into the following regions: (a) *Southern Association of Colleges & Schools* (*SACS*); (b) *New England Commission on Higher Education* (*NECHE*); (c) *Higher Learning Commission* (*HLC*); (d) *Middle States Commission on Higher Education* (*MSCHE*); (e) *Northwest Commission on Colleges and Universities* (*NWCCU*); and (f) *Western Association of Schools and Colleges* (*WASC*). Assessment culture was the dependent variable and measured using the following *Assessment Culture Scales*: (a) *Focus on Student Learning;* (b) *Fear or Distrust of Assessment*; (c) *Benefits of Assessment*; (d) *Clarity of Assessment Leadership*; (e) *Use of Assessment Data*; and (f) *Sharing Assessment Results.* The indication of statistically significant differences based on geographic region would allow for the rejection of the null hypothesis.

The third and final research question was whether differences existed in assessment cultures in student affairs as a function of institutional size and geographic region. The null hypothesis was that no statistically significant differences existed between the two independent variables and the dependent variable. The alternative hypothesis was that statistically significant differences did exist among the variables.

Similar to the other two research questions, MANOVA were conducted to determine whether differences were present. Institutional size was categorized into the following categories: (a) *Less than 1,000 Students*; (b) *Between 1,000-4,999 Students*; (c) *Between 5,000-19,999 Students*; and (d) *20,000 or More Students*. Geographic region was divided by the following: (a) *SACS*; (b) *NECHE*, (c) *HLC*; (d) *MSCHE*; (e) *NWCCU*; and (f) *WASC*. As with the other two analyses, the dependent variable was assessment culture, which was measured by the following *Assessment Culture Scales*: (a) *Focus on Student Learning;* (b) *Fear or Distrust of Assessment*; (c) *Benefits of Assessment*; (d) *Clarity of Assessment Leadership*; (e) *Use of Assessment Data*; and (f) *Sharing Assessment Results*. The presence of statistically significant differences among assessment cultures based on institutional size and geographic region would allow for the rejection of the null hypothesis.

At the conclusion of all MANOVA tests, the results were reviewed utilizing Wilks' lambda at a .05 or 5% level to determine whether the null hypotheses were to be rejected (Meyers, Gamst, & Guarino, 2013). In addition, Type II errors were evaluated to determine the power of the tests (Meyers et al., 2013). When one or more of the conducted MANOVA yielded statistically significant differences between the independent and dependent variables, a general linear model (GLM) analysis was conducted to further explore the differences. GLMs are highly versatile and allow researchers to see the nature of the differences created in multivariate tests versus tests like ANOVA and MANOVA, which produce results that only confirm the presence of statistically significant differences. Depending on the results yielded, a GLM has the ability to account for unequally distributed data via least square means (Meyers et al., 2013).

Statistical Assumptions

The statistical assumptions checked for MANOVA were the following: (a) independence of observations; (b) sufficient sample size; (c) no univariate or multivariate outliers; (d) observations are normally distributed; (e) linear relationship; (f) no multicollinearity; and (g) homogeneity of the variance-covariance matrices (Meyers et al., 2013). Independence of observations refers to each test or participant being independent and thus only counting once in the data set, as opposed to the same participant being counted multiple times in the data set (Meyers et al., 2013). A sufficient sample size for MANOVA is dependent upon the number of cells in each subset of the sample. However, each cell should have at least the same number of values as there are dependent variables (Meyers et al., 2013). Also, MANOVA analyses are sensitive to univariate or multivariate outliers. While the observation of a scatterplot would typically identify outliers, when dealing with multivariate analyses, the Mahalanobis distance test provides a more thorough investigation to detect any potential outliers (Meyers et al., 2013). Therefore, outliers were visually and analytically confirmed using descriptive statistics, scatterplots, histograms, and the Mahalanobis distance. Any detected outliers were removed from the data.

Following the examination and treatment of outliers, normality was determined by assessing the standardized skewness coefficient (i.e., skewness divided by the standard error of skewness) and the standardized kurtosis coefficient (i.e., kurtosis divided by the standard error of kurtosis) (Onwuegbuzie & Daniel, 2002). These findings were evaluated based on a 3.00 and -3.00 range of normality (Onwuegbuzie & Daniel, 2002). When conducting MANOVA, a linear relationship must be present between dependent variables. The presence of a linear relationship was determined by observing a Q-Q Plot. Moreover, when conducting MANOVA, dependent variables cannot be highly correlated and should avoid multicollinearity if possible. However, dependent variables must be, and often are, correlated to a certain extent. The last preparatory analysis checked was homogeneity of the variance using covariance matrices. To do so, the researcher conducted a Box's M test to determine whether the matrices were equal (Meyers et al., 2013). In conducting these analyses for MANOVA, the statistical assumptions for GLM were examined and satisfied as well.

Once the establishment of normality and all other statistical assumptions were met, MANOVA were conducted using SPSS version 25's General Linear Modeling commands. For this study, the *Assessment Culture Scales* were used to measure the dependent variable. For the first research question, the independent variable was institutional size, which required the use of a one-way MANOVA. Similarly, the independent variable for the second research question was geographic region, which also required the use of a one-way MANOVA. The third research question considered both institutional size and geographic region as independent variables and thus, required the utilization of a two-way MANOVA.

Furthermore, squared partial correlations were evaluated to determine the level of effect size of the findings, which shows "the degree to which the null hypothesis is false" (Cohen, 1988, p. 9). Cohen (1988) recommended the following classifications: (a) small effect size (i.e., values between 2% and 12.99%), (b) medium effect size (i.e., values between 13% and 25.99%), and (c) large effect size (i.e., values higher than 26%). An alpha level of .05 was used to assess significance in this study (Creswell, 2009). These analyses allowed the researcher to fully examine the research questions posed in this study.

Summary

The methods for this non-experimental design were crafted to explore the differences in variables associated with cultures of assessment in student affairs and institutional size and geographic region. The implementation of MANOVA allowed the researcher to determine whether to reject the null hypotheses. Once the null hypotheses were rejected or accepted, data were further explored utilizing GLM. Details of all analyses conducted and the results yielded were described in Chapter IV, while conclusions and recommendations were discussed in Chapter V.

CHAPTER IV
Results

This study was conducted using a non-experimental quantitative research design due to the use of archival data sets. Non-experimental research designs allow researchers to save resources and practically explore variables in a different context (Johnson, 2001; Johnson & Christensen, 2016). After approval was received from the SHSU IRB, data collected from the *Student Affairs Survey of Assessment Culture* were accessed, reviewed, and prepared for analyses. Data collected from the *Student Affairs Survey of Assessment Culture* were utilized since the instrument evaluated how mid-level professionals in student affairs nationwide perceived assessment culture at their respective institutions and thus generated data for the selected *Assessment Culture Scales*. Once data preparation concluded, all data were imported to SPSS to begin descriptive statistics and statistical analyses. MANOVA and GLM were utilized to observe whether differences existed between the selected independent and dependent variables.

An exploration was conducted to observe whether differences were present in student affairs assessment cultures as a function of contextual factors (i.e., institutional size and geographic region). Divisions of student affairs across the nation have faced increasing accountability demands, which has necessitated more research and discussion for how to develop and sustain cultures of assessment. However, gaps in the literature reviewed pertaining to cultures of assessment in student affairs suggested there was a crucial need for more research. Most research related to cultures of assessment were qualitative without the use of theoretical framework and focused internally within the institution. Understanding cultures of assessment in divisions of student affairs is not only essential for meeting accountability demands, but also to the feasibility of increasing student learning and success at universities across the nation. The findings discussed in this chapter will provide more insight to university administrators and will advise other researchers on whether further investigation into contextual factors should be considered in future studies on cultures of assessment in student affairs.

The purpose of Chapter IV was to divulge the findings of this study. To do so, a brief restatement of the research questions was provided followed by an account of all data analysis procedures utilized. Subsequently, the remainder of the chapter consisted of an extensive discussion of the results from all descriptive and statistical analyses conducted.

Research Questions

This study explored what differences, if any, were present when cultures of assessment in student affairs were observed based on geographic region and institutional size. Accordingly, assessment culture was the dependent variable and measured using *Assessment Culture Scales*. The independent variables were institutional size, geographic region, and institutional size and geographic region. Institutional size was sorted into the following subscales: (a) *Less than 1,000 Students*; (b) *Between 1,000-4,999 Students*; (c) *Between 5,000-19,999 Students*; and (d) *20,000 or More Students* (McFarland et al., 2019). Geographic region consisted of the following subscales: (a) *SACS*; (b) *NECHE*; (c) *HLC*; (d) *MSCHE*; (e) *NWCCU*; and (f) *WASC*. The following research questions were addressed in this study: (a) What differences, if any, in assessment culture were present as a function of institutional size?; (b) What differences, if any, in assessment culture were present as a function of geographic region?; and (c) What differences, if any, in assessment culture were present as a function of institutional size and geographic region?

Null Hypothesis

To restate, null hypotheses are postulations that no statistical significance exists between the independent and dependent variable(s) (Creswell, 2009). Therefore, the null hypothesis can only be accepted in the event that no statistical significance is present between the independent and dependent variable(s). The following were the null hypotheses for this study: (a) No statistically significant differences in assessment culture were present as a function of institutional size; (b) No statistically significant differences in assessment culture were present as a function of geographic region; and (c) No statistically significant differences in assessment culture were present as a function of institutional size and geographic region.

Alternative Hypothesis

An alternative hypothesis postulates a researcher's predictions as to what results will be yielded in the study (Creswell, 2009). Accordingly, three alternative hypotheses were made in the event of the rejection of any of the posited null hypotheses stated. The following were the alternative hypotheses for this study: (a) Statistically significant differences in assessment culture were present as a function of institutional size; (b) Statistically significant differences in assessment culture were present as a function of geographic region; and (c) Statistically significant differences in assessment culture were present as a function of institutional size and geographic region.

Preparation of Data

Data responses from the *Student Affairs Survey of Assessment Culture* were received in a Microsoft Excel spreadsheet and examined for any missing information, inconsistencies, or negative wording. Preliminary observations confirmed that responses were coded based a 6-point Likert-format scale and as they appeared on the survey ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). There was a reasonable expectation that there would be some missing data given that survey respondents were not compelled to complete the entire survey, and all responses with 50% or more of the survey completed were included in the data. However, missing items accounted for less than 5% of the responses and all missing items were assigned a code (i.e., 99999). No inconsistencies were observed in the data and all negatively worded items were reverse coded to ensure all scale items were ordered in the same direction (Fuller & Lane, 2017; Fuller et al., 2016).

Data were also examined to determine whether any additions or updates had been performed since Fuller and Lane (2017). As with Fuller and Lane (2017), data observed contained 771 responses (p. 21). An observation of the number of entries was conducted to determine whether the number of entries were consistent with what was used in Fuller and Lane (2017), which was 771 responses as well (p. 21). The consistent number of responses and data coding indicated that no changes had been made to data since used in Fuller and Lane (2017). As previously mentioned in Chapter III, Fuller and Lane (2017) conducted an exploratory factor analysis with principal axis factoring, which condensed their initially proposed 9-factor model to a 4-factor model. The refined 4-factor model yielded an acceptable level of communality and range of variance (i.e., 56%) (p. 21-22).

The 4-factor model used by Fuller and Lane (2017) in the 2016 *Student Affairs Assessment Survey* consisted of the following *Assessment Culture Scales*: (a) *Clear Commitment to Assessment*; (b) *Assessment Communication*; (c) *Connection to Change*; and (d) *Fear of Assessment* (Fuller & Lane, 2017, p. 22). While the initially proposed 6-factor *Assessment Culture Scales* (i.e., (a) *Focus on Student Learning;* (b) *Fear or Distrust of Assessment*; (c) *Benefits of Assessment*; (d) *Clarity of Assessment Leadership*; (e) *Use of Assessment Data*; and (f) *Sharing Assessment Results*) derived from studies on assessment culture within student affairs, academic affairs, and administrators (Fuller, 2013; Fuller & Lane, 2017; Fuller & Skidmore, 2014; Fuller et al., 2016), each of those factors could also be encompassed within Fuller and Lane's (2017) 4-factor model (i.e., (a) *Clear Commitment to Assessment*; (b) *Assessment Communication*; (c) *Connection to Change*; and (d) *Fear of Assessment*). Given the 4-factor model was developed by the Primary Investigator specifically for measuring student affairs assessment culture, and that no other data were added to the provided set, the originally proposed 6-factor *Assessment Culture Scales* were adjusted to the 4-factor model as identified by Fuller and Lane (2017). Ultimately, the focus of this study was purely explorative with no intention of reinventing an already established instrument or framework, but to apply an already developed and established instrument to new hypotheses.

Data from 38 of the 52 items on the *Student Affairs Survey of Assessment Culture* were categorized into their respective factors within the *Assessment Culture Scales*. *Clear Commitment to Assessment* was the first factor and consisted of the following items: 3, 6, 8 ,9R, 12, 13, 18, 21, 23, 25, 26R, 31, 36, 49, and U2 (Fuller & Lane, 2017, p. 22). *Assessment Communication* was the second factor and consisted of items 48, 49, 51R, 52, 53, 54, 55, 58, 66, 4H, and U5 (Fuller & Lane, 2017, p. 22). The third factor was *Connection to Change* and consisted of items 7R, 8, 13, 56R, 58, 60, 61, 66, 67, 3J, and U2 (Fuller & Lane, 2017, p. 22). The fourth and final factor was *Fear of Assessment* with the following items: 4R, 7R, 10R, 11R, 57R, 62R, 64R, and 65R (Fuller & Lane, 2017, p. 22). These factors formed the *Assessment Culture Scales* and were used to measure the dependent variable in the analyses.

Upon competition, coding for the two independent variables (i.e., institutional size and geographic region) commenced. Data provided specified each respondent's institution of employment. From there, extensive online research was conducted on each institution to determine the institution's size and location. Information was collected from both the respondent's institutional website and the National Center for Education Statistics (McFarland et al., 2019).

As previously discussed, geographic region was divided into six subscales based on already established accreditation regions. Geographic region for each of the respondents was secured by locating a valid physical mailing address on the institution's webpage. From there, each institution was assigned to a specific accrediting region based on the state where the institution was located. Refer to Table 1 for more information on the specific states in each of the accrediting regions. Geographic regions were coded as follows: (a) *SACS* = 1; (b) *NECHE* = 2; (c) *HLC* = 3; (d) *MSCHE* = 4; (e) *NWCCU* = 5; and (f) *WASC* = 6. After coding geographic region for each respondent, a review of the distribution of responses in each of the assigned subscales was performed to confirm whether a reasonable amount of responses in each subscale were present. The review determined a sufficient distribution of responses among all six of the subscales was present.

Each respondent was then assigned a code based on their respective institution's size. Data were coded based on the following: (a) *Less Than 1,000 Students* = 1; (b) *Between 1,000-4,999 Students* = 2; (c) *Between 5,000-19,999 Students* = 3; and (d) *20,000 or More Students* = 4. While coding each respondent's institutional size, there were 11 responses that could not be coded based on their institutional size. Specifically, the 11 responses that were not coded were received from mid-level student affairs professionals who were officed at an alternative location apart from where their affiliated institution hosted their student population. As a result, those responses were assigned the missing value code (i.e., 99999). As similarly performed with the geographic region subscales, a review of distribution of responses into each of the institutional size subscales was conducted. The review indicated that only two responses were present in the *Less Than 1,000 Students* subscale. Meyers et al. (2013) considered a sufficient MANOVA sample size to be a number of cases in each subscale larger than the number of subscales within the dependent variables (p. 226). Given that the *Less Than 1,000 Students* subscale lacked a sufficient sample size, the responses in *Less Than 1,000 Students* were recoded with a *2* and recategorized into the *Between 1,000-4,999 Students* subscale. Thus, by collapsing the *Less Than 1,000 Students* subscale into the *Between 1,000-4,999 Students* subscale, items coded with a 2 were redefined as institutions with an enrollment of *Less Than 5,000 Students*. After all adjustments were made, statistical analyses were performed.

Results

Analyses performed provided descriptive statistics for both the independent and dependent variables. Preliminary observations were made to confirm that all statistical assumptions for a robust MANOVA were met so that reliable results could be produced. For a robust MANOVA, the following statistical assumptions were tested: (a) sufficient sample size, (b) independence of observations, (c) linear relationship, (d) no univariate or multivariate outliers, (e) normal distribution of observations, (f) no multicollinearity, and (g) homogeneity of the variance-covariance matrices (Meyers et al., 2013).

To begin, MANOVA require a sufficient sample size (i.e., number of cases in each category must exceed number of dependent variables) (Meyers et al., 2013). Therefore, a review of the distribution in each of the subscales was performed to confirm whether a sufficient number was present. Responses from 771 respondents were calculated.

Table 3

Range, Mean, and Standard Deviations for Dependent Variable

Variable	*Min*	*Max*	*M*	*SD*	*n*
Clear Commitment to Assessment	1	6	4.17	.70	771
Assessment Communication	1	6	3.68	.80	678
Connection to Change	1	6	4.12	.75	769
Fear of Assessment	1	6	2.74	.86	769

The range, means, and standard deviations for the dependent variable subscales were presented in Table 3. The number of responses for each of the following assessment culture subscales were as follows: (a) *Clear Commitment to Assessment* (n = 771); (b) *Assessment Communication* (n = 678); (c) *Connection to Change* (n = 769); and (d) *Fear of Assessment* (n = 769). Of the four subscales used to measure assessment culture in divisions of student affairs, *Fear of Assessment* ranked lowest in terms of the average mean (M = 2.74, SD = .86), while *Clear Commitment to Assessment* (M = 4.17, SD = .70) had the highest mean, followed closely by *Connection to Change* (M = 4.12, SD = .75) and *Assessment Communication* (M = 3.68, SD = .80).

Descriptive statistics for geographic region showed that the sample size (i.e., N = 771) was consistent with the total number of responses provided in the data used. A sufficient distribution of responses among all six of the subscales was present with the largest sample from *SACS* (n = 262). *NWCCU* had the smallest distribution of the six regions with only 3.6% of the responses. Distribution for each of the geographic regions were presented in Table 4.

Table 4

Distribution of Survey Responses by Geographic Region

Geographic Region	*Frequency*	*Percentage*
Higher Learning Commission	188	24.4
Middle States Commission on Higher Education	197	25.6
New England Commission of Higher Education	32	4.2
Northwest Commission on Colleges and Universities	28	3.6
Southern Association of Colleges and Schools	262	34
Western Association of Schools and Colleges	64	8.3

As similarly performed with the geographic region subscales, a review of the distribution of responses into each of the institutional size subscales was conducted. For institutional size, only 760 of the 771 responses were utilized due to 11 of the responses not being eligible due to the survey respondents being officed at an off-site location away from their main institutional campus. The largest sample derived from respondents from institutions with a student population *Between 5,000 and 19,999* (*n* = 370). Of the 760 responses considered for institutional size, 16.1% had *Less Than 5,000 Students*, 48.7% had *Between 5,000-19,999 students*, and 35.3% had *20,000 or More Students*. Frequencies for each of the institutional size subscales were presented in Table 5.

Table 5

Distribution of Survey Responses by Institutional Size

Institutional Size	*Frequency*	*Percentage*
Less Than 1,000 Students	2	.20
Between 1,000-4,999 Students	120	15.6
Between 5,000-19,999 Students	268	48
20,000 or More Students	760	34.8
Missing	11	1.4

Note. Frequency of categories prior to creation of *Less Than 5,000 Students* category (i.e., merger of *Less Than 1,000 Students* and *Between 1,000-4,999 Students* categories).

The distributions confirmed sufficient samples in each of the subscales. Sufficient sample sizes for the institutional size subscales were acceptable as a result of integrating two of the institutional size subscales (i.e., *Less than 1,000 Students* and *Between 1,000-4,999 Students*). In addition, the figures provided in the descriptive statistics indicated that the data had an independence of observations (e.g., sample was random, each participant was only counted once), since the total percentage of participants in each variable did not exceed the total number of overall responses and a selection pattern was not detected (Mertler & Vannatta, 2017; Meyers et al., 2013).

Also, observations of Q-Q plots and histograms were made to determine linearity and whether outliers were present. MANOVA are sensitive to outliers and thus data must be checked to ensure that few to none outliers are present (Mertler & Vannatta, 2017; Meyers et al., 2013). After observing all Q-Q plots and histograms, linearity appeared to be present and there was no obvious indication of the presence of outliers. However, the Mahalanobis distance test was conducted to confirm the observations (Meyers et al., 2013). The Mahalanobis distance test allows researchers to “measure the distance of cases from the mean(s) of the predictor variable(s)” (Field, 2013, p. 307). Since outliers can impact normality, the Mahalanobis distance test was also utilized to determine normality (Field, 2013; Meyers et al., 2013). The generally accepted threshold of three standard deviations or less was used as a guide for these analyses; no data points exceeded this threshold.

Normality was confirmed by assessing the standardized skewness coefficient (i.e., skewness divided by the standard error of skewness) and the standardized kurtosis coefficient (i.e., kurtosis divided by the standard error of kurtosis) (Onwuegbuzie & Daniel, 2002). As recommended by Onwuegbuzie and Daniel (2002), the range of normality for produced coefficients was -3.00 and 3.00. The standardized skewness coefficient for *Assessment Communication* (-.42) indicated normality, while standardized skewness coefficients for *Clear Commitment* (-9.58), *Connection to Change* (-8.89), and

Fear of Assessment (4.61) were considered outside of the range of normality. In addition, the standardized kurtosis coefficients for *Assessment Communication* (-1.88), *Connection to Change* (2.45), and *Fear of Assessment* (-.53) were all within the range of normality, with *Clear Commitment* (-9.58) as the only subscale outside of the range of normality. However, because at least half of the variables produced coefficients that were within the range of normality and the Q-Q plots reviewed indicated normality, the assumption of normality was made and were within generally accepted educational research norms.

When conducting MANOVA, multicollinearity (i.e., highly correlated variables) should be avoided while still ensuring that variables are still correlated to a certain extent (Meyers et al., 2013). To check for multicollinearity, the variance inflation factors were reviewed as produced by SPSS. All dependent variable subscales were below the recommended .80 level (Meyers et al., 2013).

Lastly, homogeneity of the covariance matrices was observed utilizing Box's test of equality of covariance matrices (Meyers et al., 2013). The test produced a Box's M statistic (i.e., .003) that was not significant at $P < .001$ (Field, 2013; Mertler & Vannatta, 2017; Meyers et al., 2013). Thus, the assumption of homogeneity was met and accordingly, Wilks' Lambda was utilized as the test statistic as opposed to Pillai's Trace (Field, 2013; Mertler & Vannatta, 2017; Meyers et al., 2013). As a result of all statistical assumptions for robust MANOVA being met, analyses for MANOVA were further investigated.

Given that all statistical assumptions for a robust MANOVA were met, a factorial MANOVA was performed instead of the performance of multiple MANOVA as previously planned in Chapter III. The decision was made by the researcher given the likelihood that completing multiple MANOVA would drastically increase Type I errors (Meyers et al., 2013, p. 237). In addition, the performance of one factorial MANOVA produced results for all research questions in this study thereby saving time.

Statistical interpretation commenced with respect to the first research question. Specifically, data were analyzed to determine whether differences in assessment culture existed when compared by institutional size in divisions of student affairs. An observation of the total means and standard deviations for the assessment culture subscales and institutional size indicated that *Clear Commitment to Assessment* (M = 4.17, SD = .69) scored highest among institutions of all sizes, followed by *Connection to Change* (M = 4.15, SD = .75) and *Assessment Communication* (M = 3.68, SD = .80). In contrast, *Fear of Assessment* (M = 2.69, SD = .84) had the largest and lowest differentiation of all of the subscales. In addition, mean scores produced in the descriptive data for each of the assessment culture subscales revealed that institutions with *Less Than 5,000 Students* had the highest mean scores for *Clear Commitment* (M = 4.25, SD = .65), *Assessment Communication* (M = 3.77, SD = .76), and *Connection to Change* (M = 4.23, SD = .63), but ranked lowest for *Fear of Assessment* (M = 2.62, SD = .84). However, data produced indicated that no statistically significant differences were present between student affairs assessment culture and institutional size, Wilks' λ = .99, F (8, 1302) = .93, p > .05. Therefore, the first null hypothesis was accepted.

The results from the statistical analyses also produced data for research question two. Research question two was whether differences existed among assessment culture in student affairs and geographic region. Analyses revealed that statistically significant differences in assessment culture were present based on geographic region, Wilks' λ =

.94, *F* (20, 2160.07) = 2.05, $p < .05$, partial eta squared = .015. Power to detect the effect was .969. The squared partial correlation indicated the presence of a medium effect size (Cohen, 1988). Therefore, the presence of statistically significant differences confirmed the rejection of null hypothesis two, thereby accepting alternative hypothesis two.

The descriptive statistics produced displayed some noteworthy patterns when all six regions were ranked from highest mean to lowest mean. Particularly, the *NECHE* region had the highest mean score in both *Clear Commitment* (*M* = 4.47, *SD* = .55) and *Connection to Change* (*M* = 4.42, *SD* = .64), and the second highest mean score in *Assessment Communication* (*M* = 3.97, *SD* = .78). Yet, *NECHE* produced the lowest mean score for *Fear of Assessment* (*M* = 2.33, *SD* = .78). In contrast, the *HLC* region ranked lowest for *Clear Commitment* (*M* = 4.10, *SD* = .66), *Assessment Communication* (*M* = 3.52, *SD* = .76), and second to lowest for *Connection to Change* (*M* = 4.05, *SD* = .74). However, *HLC* scored highest for *Fear of Assessment* (*M* = 2.76, *SD* = .85).

Supplemental GLM univariate tests including analyses of variance and a Tukey Honestly Significant Difference (HSD) test for multiple comparisons were performed to further investigate the differences. Prior to examining the univariate data, Levene's test of equality of error variance was observed at the $p < .05$. Each of the following *Assessment Culture Scales* reported as not being statistically significant, thereby meeting the assumption of homogeneity: (a) *Clear Commitment to Assessment* ($p = .05$), (b) *Assessment Communication* ($p = .34$), (c) *Connection to Change* ($p = .08$), and (d) *Fear of Assessment* ($p = .20$).

In an effort to control for Type I errors, a Bonferroni adjustment was applied to all significant levels. The application of the Bonferroni adjustment was made to account for the computation of multiple analyses to ensure that the error rate did not exceed 5% (Manly, 2004). Given that the four *Assessment Culture Scales* were observed individually by geographic region, the Bonferroni adjusted alpha level used was $p <$ 0.0125 (i.e., .05/4). As a result, statistical significance was not found for any of the following four subscales: (a) *Clear Commitment to Assessment* (p = .13); (b) *Assessment Communication* (p = .02); (c) *Connection to Change* (p = .20); and (d) *Fear of Assessment* (p = .04). Notably, *Assessment Communication* (p = .02) *and Fear of Assessment* (p = .04) were both significant at $p < .05$. The lack of significance may have been the result of the analyses performed not considering intercorrelations among variables (Meyers et al., 2013).

The third research question was whether assessment culture in divisions of student affairs differed by both institutional size and geographic region. In reviewing the results of the analyses performed, statistically significant differences were produced between institutional size and geographic region among assessment cultures in divisions of student affairs, Wilks' $\lambda = .94$, F (20, 2160.07) = 1.90, $p < .05$, partial eta squared = .014. Power to detect the effect was .954. In accordance with Cohen (1988), the reported data produced a medium effect size. Thus, null hypothesis three was rejected and alternative hypothesis three was accepted.

Observations from the descriptive data displayed insightful patterns. For instance, institutions within the *SACS* region with *Less than 5,000 Students* had the highest mean scores for the following three of the four *Assessment Culture Scales*: (a) *Clear Commitment to Assessment* (M = 4.04), (b) *Assessment Communication* (M = 3.96), and (c) *Connection to Change* (M = 4.45). In contrast, institutions within the *SACS* region with *Less than 5,000 Students* had the lowest mean score for *Fear of Assessment* (M = 2.82). Similarly, in both the *NECHE* and *MSCHE* regions, institutions with enrollments *Between 5,000 and 19,999* had the highest mean scores for *Clear Commitment* (i.e., M = 4.39; M = 4.32), *Assessment Communication* (i.e., M = 4.39; M = 4.02), and *Connection to Change* (i.e., M = 4.69; M = 4.36) respectively. Correspondingly, in those same two regions (i.e., *NECHE* and *MSCHE*) institutions with an enrollment *Less than 5,000 Students* had the highest average mean for *Fear of Assessment*.

As with research question two, univariate GLM analyses were evaluated with the application of the Bonferroni adjusted significance level of $p < 0.0125$ (Manly, 2004). The results revealed statistically significant univariate main effects for institutional size and geographic region were obtained for the following: (a) *Clear Commitment to Assessment*, F (5, 654) = 3.42, p = .005; (b) *Assessment Communication*, F (5, 654) = 4.34, p = .001; and (c) *Connection to Change*, F (5, 654) = 3.44, p = .004. The effect sizes for the differences, measured by η^2, for *Clear Commitment to Assessment*, *Assessment Communication*, and *Connection to Change* were .025, .032, and .026 respectively. Using Cohen's (1988) criteria, the results indicated that all three effect sizes were within the small to medium range.

Given the univariate statistical significances found, output from the Tukey HSD test was examined. The results reviewed indicated that mean scores for *Assessment Communication* were statistically significant between the *HLC* (M = 3.49, SD = .14) and *MSCHE* (M = 3.71, SD = .07) and between the *HLC* and *NWCCU* (M = 4.08, SD = .15) regions. Moreover, the *HLC* and the *NECHE* (M = 4.16, SD = .24) regions also had statistically significant differences between them.

Summary

The intent of this study was to explore what differences in student affairs assessment culture were present when observed by institutional size and geographic region. In preparation for conducting analyses, adjustments to the procedures were made to ensure accurate and thorough findings could be reached. Those adjustments included adjusting the dependent variable subscales from a 6-factor scale to a 4-factor scale and collapsing the first institutional size subscale into the second institutional size subscale. In addition, the researcher opted to conduct a factorial MANOVA versus multiple one-way MANOVA to minimize Type I errors (Meyers et al., 2013).

Once statistical assumptions associated with MANOVA were met, a factorial MANOVA was conducted to answer the three research questions in this study. The results observed displayed statistically significant differences in assessment cultures when observed by geographic region alone and both geographic region and institutional size combined. While no statistically significant differences were found for institutional size and assessment culture, this finding may still provide guidance for administrators and other researchers.

Conclusion

In this chapter, observations were made from the results yielded based on the analyses conducted. Though the results were solely exploratory, results found indicated that there may be factors contributing to cultures of assessment in divisions of student affairs that were not previously studied. Correspondingly, Chapter V contained the implications and recommendations based on the findings in this chapter.

CHAPTER V

Discussion

A constant shortage of resources in higher education will consistently propagate demands for higher accountability in student affairs (Henning, 2016; Schuh & Gansemer-Topf, 2010; Seagraves & Dean, 2010). While divisions of student affairs provide a certain cultivation that can transcend the college experience for students, that transcendence is often lacking sufficient documentation. For this reason, divisions of student affairs should consider cultivating assessment into their functionality. While meeting accountability demands should be a priority, promoting student learning is the cornerstone of the student affairs profession (Elkins, 2015; Schuh & Gansemer-Topf, 2010). Given that assessment has the potential to provide validation of justified existence, identify areas of improvement, and promote student learning—divisions of student affairs would greatly benefit from adopting assessment culture (American Council on Education, 1937; Baas et al., 2016; Fuller, 2011; Fuller, 2013; Fuller et al., 2015; Fuller & Lane, 2017; Fuller & Skidmore, 2014; Fuller et al., 2016; Holzweiss et al., 2016; Skidmore et al., 2018).

In response to the need for more refined accountability and student learning measures in student affairs, researchers have called for divisions of student affairs to improve assessment efforts and develop cultures of assessment (Banta & Kuh, 1998; Elkins, 2015; Fuller, 2013; Fuller & Lane, 2017; Green et al., 2008; Peterson & Augustine, 2000; Schuh, 2013; Seagraves & Dean, 2010; Shefman, 2014). While assessment culture has been thoroughly researched in academic affairs, there is a considerable deficit of research on assessment culture in student affairs (Fuller & Lane, 2017; Seagraves & Dean, 2010; Shefman, 2014). Moreover, there is a lack of quantitative research on assessment culture and the adaption of a conventional framework on assessment culture. Furthermore, research on institutional characteristics (e.g., institutional size and location) and assessment culture was also needed. This study contributes to closing a gap in the literature on quantitative research on assessment culture (Fuller, 2013; Fuller & Lane, 2017; Fuller & Skidmore, 2014; Fuller et al., 2016; Ndoye & Parker, 2010; Skidmore et al., 2018), while also contributing to the sparse literature on student affairs assessment culture (Fuller & Lane, 2017; Schuh, 2013; Shefman, 2014). Most importantly though, the findings in this study provide even more insight into the nature of assessment culture.

Summary of the Findings

The intention of this study was to contribute to the literature given the disparities of research on student affairs assessment culture, and to inform stakeholders and decision-makers. Through data provided by the *Student Affairs Survey of Assessment Culture*, statistical analyses were performed and evaluated to address the research questions under consideration. Results observed indicated both anticipated and unanticipated findings.

Institutional size and geographic region were explored to observe whether differences arose when comparing assessment cultures among various divisions of student affairs. Despite the literature observed (Elkins, 2015; Fuller et al., 2016; Holzweiss et al., 2016; Oblander, 2006; Seagraves & Dean, 2010; Skidmore et al., 2018; Smart et al., 1997), differences were not observed in student affairs assessment cultures when observed by institutional size. However, assessment cultures were different when compared by geographic region, which is consistent with some of the prior literature (Fuller et al., 2016; Lane & Brown, 2004). Differences in student affairs assessment cultures were also present when observed by both institutional size and geographic region.

Data observed from the *Assessment Culture Scales* were also noteworthy. The majority of student affairs mid-level professionals seemed to understand the importance of their role in assessment but wanted the support of their administration. Similarly, student affairs professionals sought assurance that their institution's administrators were willing to transparently exchange assessment results and make changes for continuous improvement. These observations indicate that student affairs professionals believed that their institutions valued conducting assessment to improve student learning. As discussed in Maki's *Principles*, improvements to student learning are nurtured by an institution's willingness to commit to assessment efforts, communicate assessment results, and change. In contrast, student affairs professionals feared assessment, or the associated fallout of assessment, about the same. That is not to say that specific differences among subgroups observed (i.e., institutional size and geographic region) did not provide other patterns, but to merely summarize an overall observation.

Interpretation of Findings

The results of analyses conducted yielded many findings for interpretation. The findings in this study provide new perspective for practitioners, administrators, and future researchers to consider. The subsequent sections provide interpretations of the findings from each of the research questions in this study.

Institutional size. Assessment cultures in student affairs did not vary based on their institutional size, which was surprising considering there were many scholars who recommended that future researchers explore institutional size (Elkins, 2015; Fuller et al., 2016; Holzweiss et al., 2016; Oblander, 2006; Seagraves & Dean, 2010; Skidmore et al., 2018). Some scholars even suggested that institutional size was a large factor in assessment culture (Oblander, 2006; Seagraves & Dean, 2010). However, the findings in this study suggest otherwise. Moreover, the findings in this study were consistent with the works of previously reviewed organizational theory scholars who did not implicate the size of an organization as being a distinction in an organization's culture (Cameron, 1984; Fjortoft & Smart, 1994; Hatch, 1993; Schein, 2017; Smart et al., 1997; Sporn, 1996; Tierney, 1988).

With the information from this study, practitioners should consider disregarding the assumption that institutional size has a role in implementing and maintaining assessment culture. Researchers have long considered institutional size as a variable in numerous studies pertaining to a wide variety of topics in higher education which may have led to the idea that institutional size yields unique characteristics that contribute to assessment culture. Regardless of assumptions about institutional size, the results in this study provide useful insight for practitioners attempting to establish or maintain a culture of assessment in student affairs. Specifically, practitioners should consider not accounting for the size of their institution when constructing assessment culture efforts.

This suggestion would save practitioners time while also affording them the opportunity to reallocate their resources to address concerns that do create differences in assessment culture (e.g., communication, reward system). In addition, there would be increased opportunities for practitioners to exchange assessment strategies with their counterparts at nearby institutions without the hindrance of searching for an institution of comparable size. An increase in communication on assessment between nearby practitioners from institutions of various sizes could systematically improve assessment practices and increase student learning.

The findings in this study also suggest that the number of staff in divisions of student affairs may not make a difference in assessment cultures. Smaller institutions have often been characterized as having less staff with a wider range of tasks than those at larger universities, who are considered to have more staff with more specialized roles (Seagraves & Dean, 2010). Nonetheless, there were no differences observed in assessment culture indicating that institutions had the same assessment culture whether they employed numerous staff or skeletal staff. One possible explanation is that the number of staff employed at an institution is relative to institution's enrollment size and thus would explain why no differences were observed. Furthermore, contrary to the claims of previous researchers, less staff does not necessarily equate better communication or a more collaborative environment (Seagraves & Dean, 2010). Larger institutions have the same capabilities as their smaller counterparts by developing subcultures and improving communication efforts.

Likewise, larger institutions do not necessarily possess more resources for assessment efforts than smaller institutions. Some Researchers and practitioners have suggested that larger institutions have more funding, office space, and other viable resources since they have more students and thus more income (Oblander, 2006; Seagraves & Dean, 2010). However, the idea that institutional resources are more abundant in larger institutions is not a safe assumption and could be attributed to relativity. Larger institutions require more resources to support their enrollment in the same way that smaller institutions would require a relative amount of resources to support their enrollment. Thus, a larger institution would not necessarily have more resources to dedicate to assessment. However, even if an institution were to have supplemental resources to support assessment, resources alone cannot sustain assessment culture. The support of administrators and their willingness to be receptive, responsive, and transparent with assessment results regardless of the outcome is partially how assessment cultures are sustained.

Given that researchers are still working on constructing a comprehensive overview of student affairs assessment culture, they can now consider ruling out institutional size as a potential factor in their future research. By ruling out institutional size, an exploration of other plausible variables can be conducted to determine where assessment culture differences may be present. Future researchers can also use this information when identifying which institutions to collect data from or when distinguishing what information to collect. Essentially, data collection could become easier for future researchers given they would no longer be delimited to institutions of comparable size.

Geographic region. Differences in student affairs assessment culture were present when observed by geographic region. While differences were anticipated, the differences in assessment culture observed by the regions were interesting. Specifically, the observed differences related to *Fear of Assessment*. As previously noted, *Fear of*

Assessment ranked lowest of all of the scales, but the interesting aspect pertained to the patterns observed.

The student affairs mid-level professionals in the *NECHE* region indicated that the administration at their institutions provided clear expectations of assessment, communicated results associated with assessment, and permitted changed governed by assessment results. At the same time, those same individuals ranked *Fear of Assessment* lowest of all regions observed. Conversely, the student affairs professionals in the *HLC* region had the lowest average response for all scales except *Fear of Assessment*. Thus, a student affairs professional who is associated with an institution that is congruent and values student learning is not likely to fear assessment. However, a student affairs professional who is associated with an institution that provokes fear, distrust, and a lack of transparency will likely perform assessment only to meet accountability measures. Essentially, administrators cultivate a culture of distrust among their employees when they are not transparent with what they intend to do with assessment results. Distrust for an administration will ultimately provoke fear among divisional personnel, which will negatively impact any intended improvements to student learning and possibly job satisfaction. Additionally, conducting assessment with unclear expectations that will not be shared nor provoke change is viewed by employees as a waste of time and resources as noted by scholars (Al-Thani et al., 2015; Elkins, 2015; Lakos & Phipps, 2004; Schuh, 2013; Seagraves & Dean, 2010; Shefman, 2014).

The findings from this study contribute to the body of literature on assessment culture differently than previously investigated literature. Previous research on cultures of assessment typically only referenced the geographic location of an institution when providing contextual information for qualitative research (Al-Thani et al., 2015; Duff, 2010; Hill, 2005; Hong, 2018; Kalu & Dyjur, 2018; Lane et al., 2014; Piascik & Bird, 2008; Schlitz et al., 2009; Schroeder & Mashek, 2007; Shefman, 2014; Verzinski et al., 2019). In terms of quantitative studies by researchers who considered the location of the institution (Fuller & Lane, 2017; Ndoye & Parker, 2010), neither incorporated geographic region as an objective of their investigation. Also, the findings in this study do address calls for additional research on assessment culture and institutional location by Fuller et al. (2016).

The purpose of this study was only to explore differences present when considering geographic region. While findings were statistically significant, the findings only show that differences exist with no intention of determining the cause of the differences observed nor to suggest that the differences are directly related to geographic region. Future investigations will need to be conducted to examined causation of differences observed in this study.

There are some ideas as to why differences were present. Since all responses were divided based on their regional accrediting agency, differences may be present as a result of something associated with the accreditation agencies. Each regional accreditation agency has their own policies and procedures for how they maintain quality control and improve institutional effectiveness. A thorough review of how each of the regional accreditation agencies differ in their policies and procedures might provide more insight into why differences were present based on geographic region.

Regional differences may also exist as a result of each geographic region operating in a distinct way. Often times regional institutions will not only share the same accrediting agency but are located in the same state or operate under the same contentions while also sharing some of the same students and adjunct faculty. In addition, faculty, staff, and administrators might leave a position at one institution and obtain employment at another institution nearby so that they remain close to their family. All of these commonalities have the potential to contribute to a distinct regional culture or uniqueness, which could potentially explain the differences observed. Finally, regional cultural differences and norms in operating may account for some of the differences noted.

Despite these explanations, the cause or influence of the observed differences in this study was not investigated. While two potential explanations have been provided, only more research will determine the cause of the assessment culture differences observed by geographic region. However, future researchers will be able to utilize the information in this study as the foundation for future investigations into the observed differences.

Institutional size and geographic region. Assessment cultures in student affairs differed when compared by institutional size and geographic region, which was curious to the researcher since differences were not present when observed by institutional size alone. Nonetheless, notable patterns observed allowed for thorough interpretation. Particularly, student affairs mid-level professionals at institutions in the *SACS* region with an enrollment of *Less than 5,000 Students* reported higher ratings for all scales but *Fear of Assessment*, which ranked lowest when compared to the other regions. Similarly, student affairs professionals located in the *NECHE* and *MSCHE* regions at institutions with enrollments *Between 5,000 and 19,999*, perceived their institutions as being committed to assessment, maintaining communication, and having the willingness to change and were therefore not fearful of assessment. To recap, the same pattern was also observed in the *NECHE* region when exploring differences in assessment culture based on geographic region. As previously discussed, student affairs professionals who believe their administration clearly conveys expectations, provides assessment communication, and open to change, are less likely to fear assessment.

The patterns observed in the *Assessment Culture Scales*, by both geographic region and institutional size and geographic region alone, were consistent with the literature reviewed pertaining to the fears that professionals have with assessment (Fuller et al., 2015; Hill, 2005; Hong, 2018; Ndoye & Parker, 2010; Schuh, 2013; Shefman, 2014; Skidmore et al., 2018; Verzinski et al., 2019). Fear was less of a concern for the student affairs personnel in the *NECHE* region given the dominance of their perceptions regarding the other scales. Specifically, the promotion of communication, expectations, and the willingness to change, all have the ability to cultivate an environment where professionals are less likely to fear assessment (Fuller et al., 2015; Hill, 2005; Hong, 2018; Ndoye & Parker, 2010; Schuh, 2013; Shefman, 2014; Skidmore et al., 2018; Verzinski et al., 2019). Thus, in the absence of fear, professionals will conduct assessment for the sake of improving student learning on campus.

While only observations were made in this study, there is a potential explanation for the differences observed. The observed differences by both institutional size and geographic region may be a result of institutional benchmarking. Benchmarking is a common practice of administrators and practitioners at institutions of higher education. Institutional benchmarking typically entails an institution searching and identifying other institutions with similar characteristics as their own for the purposes of identifying what practices work best. Logically, institutions look to benchmark themselves against other institutions similar in enrollment and any other features that allow them to figuratively compare apples to apples. In doing so, institutions would opt to benchmark themselves against institutions with similar enrollment from locations near and far away. Since benchmarking allows institutions to review and improve their practices, assessment practices would most likely be included. Thus, the differences observed by both institutional size and geographic region may be the result of regional institutional benchmarking.

Regional institutional benchmarking is a theoretical explanation for the differences observed. There is no attempt to implicate influence or cause of the findings in this study. Additional research would need to be conducted to determine precisely why differences were present in assessment cultures by both institutional size and geographic region.

Implications of Findings

The findings of this study introduce the potential for a fresh perspective on how cultures of assessment in student affairs are understood. Most of the current literature reviewed on cultures of assessment explored what factors contributed to the cultivation and maintenance of assessment culture. Of the factors explored, scholars delimited their research to what internal measures and actions an organization took to convert their employees to a culture of assessment. However, the findings in this study indicate that external factors should also be taken into consideration.

Furthermore, the idea of consideration for external factors in organizational culture is not foreign. As briefly discussed in Chapter I, Schein (2017) explained that an organization's culture forms and adapts from the existence of external pressures. Despite the explorative nature of this study, the findings signal that further research should be conducted to explore whether a significant relationship between external factors and higher education institutions exists. If external accountability measures are continually present and building, an organization must develop a culture that not only meets preset measures, but also aids in continually improving student learning—the overall intention of higher education.

Moreover, institutions of higher education answer to both internal and external stakeholders on a regular basis. Most institutions strive to maintain a malleable culture due to the robust amount scrutiny received from numerous and diverse stakeholders. For instance, an institution of higher education must answer to students and their parents, faculty, and staff (i.e., internal stakeholders). Additionally, institutions must also maintain a rapport with alumni, donors, numerous lawmakers, politicians, local and state government entities, and governing and accrediting agencies (i.e., external stakeholders). Considering all of the relationships and fluidity that institutions must maintain, it would only seem plausible that building and maintaining a culture of assessment would require the exploration of factors from both internal and external stakeholders and how their presence impacts assessment culture.

Then again, the concept of the influence caused by external factors is not unheard of to research scholars. Researchers everywhere observe both internal and external validity in their scholarly work with the understanding that both internal and external forces may influence the outcomes of their research. Essentially researchers and decision-makers are urged to consider the same implications when forming or maintaining cultures of assessment.

While the findings of this study were specific to geographic region and institutional size, the differences found in this study may have been the result of other factors not explored. As previously stated, more research is needed to explore what external factors might create differences in assessment culture, and the nature and extent of those differences. A number of external factors could be considered.

In this study, geographic regions were based on the higher education accreditation regions. Thus, more studies on how the specific policies of each of those regions may be contributing to assessment culture should be explored. Also, given that each state imposes their own accountability measures and benchmarks, those policies should also be investigated. By studying accountability policies and measures imposed by external entities and how they impact assessment culture, more insight could be gained as to how certain policies invoke certain organizational responses thereby having an indirect impact on the assessment culture.

Identifying specific conditions that are influencing assessment culture can give insight into what kind of influence, if any, those factors are imposing on institutions of higher education and assessment culture. This is similar to the research assessment scholars conducted when investigating which factors were indicative or contributing to assessment cultures in higher education (Fuller, 2013; Fuller et al., 2015; Fuller & Lane, 2017; Fuller et al., 2016; Grunwald & Peterson, 2003; Kezar, 2012; Schuh, 2013; Slager & Oaks, 2013). Once researchers are able to identify indicators and understand the nature of any relationships between any external factors and assessment culture, further actions can be taken by decision-makers. By providing this information to decision-makers, institutional policies on assessment and how assessment is conducted could be reviewed and improved upon so that the organization is not simply adapting to external factors but thriving from them. Ultimately, identifying how influences outside of an institution shape the culture would give decision-makers a better understanding of their institution's culture and allow them the information needed to create a structure that can be easily evolved and adapt to future changes (Cameron, 1984; Fjortoft & Smart, 1994; Hatch, 1993; Schein, 2017; Smart et al., 1997; Sporn, 1996; Tierney, 1988). An organization has the potential to secure their future when they conquer the ability to adapt to change.

Also, the availability of more data on assessment culture for decision-makers allots for a more thorough understanding of how and why an institution functions as such and how improvements can be incorporated. This study provides insight into how student affairs assessment cultures may vary when observed through external factors. Though results of this study should be used with caution given the present study is only exploratory, decision-makers can still begin considering how their immediate contextual factors create certain responses from their institutions and how those responses can be altered or improved upon. This process can begin by reviewing local and state statutes that may influence the nature of how and why assessment is conducted at an institution. Similarly, decision-makers can review how their designated accreditation firm handles institutional accountability when compared to others and look for policies or requirements that prove most beneficial for the institution. In addition, decision-makers should consider visiting institutions in other accrediting regions to explore how they respond to accountability demands while simultaneously continuing to improve student learning. These comparisons may give decision-makers the information needed to improve their own assessment efforts and draw ideas for how to remedy any impeding issues or concerns from such contextual factors.

The implications of this study stem even further beyond the individual institutions and their decision-makers. A thorough understanding of the nature of external factors on institutional culture has the potential to lead to significant changes to assessment policies regionally and even nationwide. Using the information provided in this study, researchers would know that assessment cultures are different in ways not previously considered (i.e., geographic region and institutional size; geographic region). In knowing that differences exist, researchers can continue to narrow down why such differences exist and whether those differences are the result of certain accountability measures imposed by external entities. If researchers were able to identify how factors not previously considered might contribute to how an institution develops and maintains their culture of assessment, more research on those factors could be investigated to offer an optimal structure for assessment accountability. In knowing an optimal structure for assessment accountability, researchers and other key stakeholders could review policies established by various regional accrediting boards, state governing boards, and even the United States Department of Education, to see how such policies work for institutions and which policies could be improved upon. Given that these external entities are traditionally data driven, providing these entities with data to support specific policy measures that cultivate assessment and accountability in institutions and support the continual improvement of student learning, would be a win-win for all parties involved and would no doubt lead to significant policy changes.

Another implication associated with the findings in this study is the utilization of a dependable theoretical framework for assessment culture. The framework utilized for this study was Maki's (2010) *Principles of an Inclusive Commitment*. While the overall findings show that cultures of assessment differ based on geographic region and a combination of geographic region and institutional size, there is also the observance of how certain regions self-report their cultures of assessment, which is pertinent to Maki's *Principles.* Numerous patterns observed showed that student affairs professionals who expressed that their institutions promoted assessment communication, commitment, and a willingness to change, experienced less fear of assessment. Maki's (2010) *Principles of an Inclusive Commitment* encouraged institutions to commit to assessment through various anchors including an encompassing commitment to assessment and the process of continually improving student learning on campus through methods other than fear. Therefore, the findings were consistent with Maki's *Principles* in that there were student affairs professionals who reported that their institutions supported their assessment efforts making them less likely to fear assessment and sustain student learning on campus (Fuller et al., 2015; Hill, 2005; Hong, 2018; Ndoye & Parker, 2010; Schuh, 2013; Shefman, 2014; Skidmore et al., 2018; Verzinski et al., 2019). Accordingly, the findings of this study further support Maki's *Principles* as a sound framework for assessment culture.

Correspondingly, findings from this study illustrate the relationship of student learning's role in cultures of assessment relative to fear in organizations. Previously stated implications of these observations pertained to institutional administrators when discussing findings for geographic region and both institutional size and geographic region. However, perhaps the implications of these findings go beyond the institutional unit and the support of the administration. Specifically, some regions indicated the presence of assessment cultures that promoted student learning while other regions indicated the presence of fear-based assessment cultures. More research should be conducted on influences outside of the organization to determine whether something beyond the scope of the institution is provoking fear in student affairs professionals in some regions of the country while supporting student learning in others.

From a practical perspective, the information in this study can provide practitioners with evidence for what kinds of assessment cultures are perceived among the student affairs professionals throughout the various geographic regions nationwide. As previously discussed, the presence of an assessment culture that sustains student learning not only satisfies internal and external accountability measures, but also continually improves efforts. Thus, practitioners can use the findings in this study for their respective region to benchmark their institution's assessment efforts, identify areas of improvement, and ultimately create an assessment culture based on student learning.

A sustainable assessment culture dedicated to continually improving student learning is largely dependent upon the decision-makers involved regardless of the size of an institution. Essentially, cultures of assessment thrive when decision-makers are clear of their assessment expectations and intentions while remaining congruent with any actions associated with assessment. Decision-makers who choose to support assessment efforts will develop a culture of assessment that is sustainable, while those who opt to implement assessment through fear will continually struggle with maintaining their assessment culture. Progress can be made when assessment efforts are inclusive of everyone in the division and when there is a collective commitment by all to continually improve. Therefore, student affairs decision-makers should consider a form of regular communication for all staff that highlights what assessment efforts are underway, what results have already been yielded, and how yielded results will contribute to the progress of the division as a whole. In doing so, decision-makers will begin to demonstrate their commitment to supporting assessment efforts while remaining transparent, which will ultimately form a necessary foundation of trust to build upon.

The outcomes observed in this study are consistent with previous research on student affairs assessment culture, which further validates the use of the *Student Affairs Survey of Assessment Culture*. The validity of the survey is strengthened given that the results in this study are consistent with prior research. The reliability of the survey is also strengthened given that student affairs professionals from across the nation in various regions and sizes provided consistent responses. Thus, the findings in this study further support the use of the *Student Affairs Survey of Assessment Culture* in future research. The implications of a reliable and valid instrument for conducting quantitative research on cultures of assessment in student affairs are infinite. The ability to quantifiably measure assessment culture gives researchers the opportunity to have a comprehensive perspective that has to potential to yield generalized results.

Research Limitations

As previously mentioned, limitations were present in this study, but future researchers may have the opportunity to address some of the limitations incurred. Ecology validity was a concern in this study since the context of each individual institution was unknown and might have contributed to the differences observed. This could be addressed in future research studies through the performance of mixed methods study that not only included the quantitative aspects of this study, but also a qualitative aspect. A qualitative component would allow researchers to gain more contextual information on the institutions studied. Temporal validity, which refers to generalization of research findings throughout time was also considered in this study (Johnson & Christensen, 2016). Since data analyzed were collected as early as 2016, the findings in this study were observed with caution. This issue could be addressed in future studies through the utilization of data collected at a more recent time.

There was also a content validity concern that should be considered in future research. Content validity refers to how well a construct is measured by the selected instrument (Meyers et al., 2013). Specifically, content validity issues occurred with the *Assessment Culture Scales*. This study was initiated with the intention of using six scales to identify student affairs assessment culture. While six scales were initially selected to accurately measure assessment culture in general based on the literature reviewed (Fuller, 2013; Fuller & Lane, 2017; Fuller & Skidmore, 2014; Fuller et al., 2016), only the 4-factor model recommended by Fuller and Lane (2017) produced an acceptable percentage of variance for the *Student Affairs Survey of Assessment Culture*. The 4-factors identified by Fuller and Lane (2017) were the following: (a) *Clear Commitment to Assessment*, (b) *Assessment Communication*, (c) *Connection to Change*, and (d) *Fear of Assessment* (p. 22). Thus, researchers are recommended to use the 4-factor model when assembling *Assessment Culture Scales* for investigating student affairs assessment culture in future studies.

The remaining validity issues in this study pertained to the measurement validity of both institutional size and geographic region. Initially, the selected categories for institutional size were based on those used by the Department of Education due to the amount of data annually acquired, compiled, and reported on institutions of higher education nationwide (McFarland et al., 2019). However, these categories were not appropriate for data used and were adjusted early in the study to accommodate the disparity of responses from institutions with an enrollment below 1,000. The selection of different categories could potentially address this issue in future studies. Similarly, measurement validity was also a concern for the categories used for geographic region. The newness of the *Student Affairs Survey of Assessment Culture* provided a lack of sufficiently refined data, which resulted in the use of accreditation regions as the categorical identifier for all geographic locations of survey respondents. In the future, researchers may be able to access data that contains a larger sample size from various locations across the country enabling geographic location to be measured by other means such as state or territory.

Future Research

While effects and influences were not investigated, the findings in this study contribute to a deeper understanding of assessment culture and provide various potential avenues for future researchers to explore. Researchers should use this information to further explore potential causation of the differences observed in this study. State mandates, funding sources, and specific institutional characteristics or circumstances are just some of the potential factors to consider. As previously mentioned, the policy implications are vast if researchers are able to identify the ideal factors or conditions that institutions are not only able to adapt, but also thrive under. Another research area to consider would be comparing and contrasting mandates from government agencies and accreditation firms and how institutions are performing under those specific requirements.

Another assessment culture inquiry that future researchers might consider is whether the differences observed in student affairs assessment cultures would be observed in academic affairs assessment cultures in the same respective geographic regions and institutional sizes. Determining this information would give researchers a better understanding of whether to consider certain policies or factors related specifically to divisions of student affairs or whether overall geographic regions and institutional sizes were congruent in both student affairs and academic affairs assessment cultures. In doing so, the scope of potential factors contributing to those differences might be narrowed since researchers would have an idea of whether the differences are specific to student affairs or across entire institutions.

Future researchers might also consider replicating this study but using different categories than those utilized for this study. A large portion of the data observed came from professionals at institutions with an enrollment between 10,000 and 20,000 students. Different results might be found if the categories for institutional size were in increments of 5,000. Also, given that the categories for institutional size in this study had to be collapsed, utilizing categories with a mostly even amount of variance between them might produce different outcomes than those observed in this study.

Another consideration for future researchers might be the used of different categories for geographic region should also be considered in future research. Future studies might include geographic differences by state should a larger sample size be available in the future or utilizing regions based on the national professional associations (i.e., NASPA and ACPA). Observing differences by state would help determine whether specific state methods or policies contribute to assessment culture. In addition, categories for geographic region could be based on the respondent's institution and their respective professional association region. Professional associations provide the profession with competencies and tend to set the standards by which professionals in the field use as a guideline. Observing differences would contribute to a deeper understanding of the impact professional organizations have on their professions.

Another suggestion for future research is the use of entirely different independent variables. One idea is to compare assessment culture perspectives based on specific departments and observe whether differences are present. Often times there are professional associations or specific characteristics associated with specific departments within divisions of student affairs such as residence life, student center, and student activities.

Future researchers might also observe whether assessment culture responses when comparing male and female professionals. Gender has often been studied in higher education and may provide insight into the dynamics of assessment culture. In addition, observing what role, if any, gender has in assessment culture will give a deeper understanding of future considerations when practitioners are implementing cultures of assessment.

While there is still a lot of research to be done on the topic, this study provides a solid starting point for what considerations should be taken. Using a sound theoretical framework, researchers should consider more quantitative studies on assessment culture as done in this study. With the information provided, other researchers can build upon this study with new variables, categories, and statistical analyses, which will ultimately contribute to a more thorough comprehension of cultures of assessment.

Conclusion

Divisions of student affairs nationwide have an opportunity to secure their placement on their campuses by embracing a culture of assessment that continually improves student learning while thoroughly understanding how both internal and external factors or influences impact assessment efforts. Through transparency, communication, and the willingness to change, student affairs administrators have the potential to convert their organizations to optimal cultures of assessment without invoking fear among divisional personnel. While this study provides insight and considerations for future research, administrators can observe how their own organization differs and begin adjusting their culture for optimal results. Meanwhile, future research should be concentrated on determining what factors contribute or influence student affairs assessment cultures and what can be done to improve assessment efforts.

Throughout this study, student affairs administrators and other key decision makers were urged to convert their organizations or improve their assessment culture. Assessment culture is vital to improving student learning, but the ultimate reason that cultures of assessment improve student learning is because of the professionals conducting the assessments. In accordance with the literature reviewed, student affairs professionals make a difference in the lives of students, but they also want to feel that their assessment work is valued and supported by their administrators. The knowledge that differences in assessment culture are present when comparing both geographic regions and institutional sizes or just geographic region, gives administrators some guidance when allocating assessment-oriented tasks to student affairs professionals. Administrators now know that they can implement assessment into their divisions without taking into consideration the size of their institution alone. Similarly, administrators now know to consider their geographic region when configuring assessment programs and infrastructure. Despite that no specific influence can be determined from this study, the mere understanding that differences are present informs administrators, decision-makers, and researchers alike that there is more to consider in assessment cultures. By knowing there is more to consider, administrators can reassess their assessment strategies and potentially reallocate resources to areas that may improve those practices. In addition, administrators are able to focus on what matters the most, which is empowering their employees to conduct assessment while sustaining an associated positive environment and improving student learning.

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APPENDIX

Institutional Review Board
Office of Research and Sponsored Programs
1831 University Ave, Suite 303, Huntsville, TX 77341-2448
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DATE:	January 22, 2019
TO:	Matt Fuller
FROM:	Sam Houston State University (SHSU) IRB
PROTOCOL TITLE:	*Survey of Assessment Culture*
PROTOCOL #:	2013-08-11722*
SUBMISSION TYPE:	RENEWAL 2019-2020
ACTION:	APPROVED
APPROVAL DATE:	January 19, 2019
EXPIRATION DATE:	**January 19, 2020**
REVIEW TYPE:	EXPEDITED
REVIEW CATEGORIES:	7

*** This submission will be transferred to Cayuse IRB as a Legacy submission; if you need to report changes to this study, please contact Sharla Miles for training.**

The Sam Houston State University (SHSU) IRB has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a project design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

Please remember that informed consent is a process beginning with a description of the project and insurance of participant understanding followed by a signed consent form. Informed consent must continue throughout the project via a dialogue between the researcher and research participant. Federal regulations require each participant receive a copy of the consent document.

Please note that this committee must approve any revision to previously approved materials prior to initiation. **Please submit a Modification Submission through Cayuse IRB for this procedure.**

All UNANTICIPATED PROBLEMS involving risks to subjects or others and SERIOUS and UNEXPECTED adverse events must be reported promptly to this office. Please submit an Incident Submission through Cayuse for this procedure. All Department of Health and Human Services and sponsor reporting requirements should also be followed.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Sam Houston State University IRB's records

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Based on the risks, this project requires continuing review by this committee on an annual basis. **Please submit a Renewal Submission through Cayuse IRB for this procedure. Your documentation for continuing review must be received with sufficient time for review and continued approval before the expiration date of January 19, 2020. When you have completed the project, a Final Report must be submitted through Cayuse IRB in order to close the project file.**

Please note that all research records should be retained for a minimum of three years after the completion of the project.

If you have any questions, please contact the Sharla Miles at 936-294-4875 or irb@shsu.edu. Please include your protocol number in all correspondence with this committee.

Sincerely,

Donna Desforges
IRB Chair, PHSC
PHSC-IRB

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Sam Houston State University IRB's records

VITA

Rachel Valle
Associate Director II of Student Activities
Sam Houston State University

EDUCATION

Doctor of Education
Higher Education Leadership
Sam Houston State University, Huntsville, Texas

Master of Public Administration
Specialization in American Politics
Sam Houston State University, Huntsville, Texas

Bachelor of Arts
Specialization in Political Science
University of St. Thomas, Houston, Texas

PROFESSIONAL EXPERIENCE

2020-Present	Sam Houston State University Associate Director II Department of Student Activities
2014-2019	Sam Houston State University Assistant Director II Department of Student Activities
2013-2014	Lone Star College-CyFair Program Manager Department of Student Life
2011-2013	Lone Star College-CyFair Coordinator I Department of Student Life

REFEREED PUBLICATIONS

Gonzales, V., Sampson, M. V., Valle, R., & Onwuegbuzie, A. J. (2015). The Doctoral Challenge: Select Women Students' Experiences in a Higher Educational Leadership Doctoral Program. *International Journal of Education, 7*(3), 121-148. doi:10.5296/ije.v7i3.7697

Jordan, J., Wachsmann, M., Hoisington, S., Gonzalez, V., Lambert, J., Aleisa, M., . . . Valle, R. (2017). Collaboration Patterns as a Function of Article Genre among Mixed Researchers: A Mixed Methods Bibliometric Study. *Journal of Educational Issues, 3*(1), 83-108. doi:10.5296/jei.v3i1.10699

Onwuegbuzie, A. J., Wilcox, R., Gonzales, V., Hoisington, S., Lambert, J., Jordan, J., . . . Valle, R. (2018). Collaboration patterns among mixed researchers: A multidisciplinary examination. *International Journal of Multiple Research Approaches, 10*(1), 437-457. doi:10.29034/ijmra.v10n1a30

Wachsmann, M. S., Onwuegbuzie, A. J., Hoisington, S., Gonzales, V., Wilcox, R., Valle, R., & Aleisa, M. (2019). Collaboration patterns as a function of research experience among mixed researchers: A mixed methods bibliometric study. *The Qualitative Report*, *24*(12).

PROFESSIONAL COMMITTEES

Students of Concern Committee, Member — 2018-Current
Sam Houston State University

Students Disciplinary Hearing Committee, Member — 2018-Current
Sam Houston State University

Parking Appeals Committee, Member — 2017-Current
Sam Houston State University

PROFESSIONAL AFFILIATIONS

American College Personnel Association (ACPA)

National Association for Campus Activities (NACA)

Student Affairs Administrators in Higher Education (NASPA)